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HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2019

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED **PROGRAMS**

BEFORE THE

COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES ONE HUNDRED FIFTEENTH CONGRESS SECOND SESSION

SUBCOMMITTEE ON READINESS

MEETING JOINTLY WITH

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

OF THE

COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES

ON

MOBILITY AND TRANSPORTATION **COMMAND POSTURE**

HEARING HELD MARCH 8, 2018



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MOBILITY AND TRANSPORTATION COMMAND POSTURE

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, SUBCOMMITTEE ON READINESS, MEETING JOINTLY WITH THE SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES, Washington, DC, Thursday, March 8, 2018.

The subcommittees met, pursuant to call, at 9:05 a.m., in Room 2118, Rayburn House Office Building, Hon. Joe Wilson (chairman of the Subcommittee on Readiness) presiding.

OPENING STATEMENT OF HON. JOE WILSON, A REPRESENTATIVE FROM SOUTH CAROLINA, CHAIRMAN, SUBCOMMITTEE ON READINESS

Mr. WILSON. Good morning. The subcommittees of the House Armed Services Committee will come to order. I welcome each of you to this joint hearing of the Readiness Subcommittee and the Seapower and Projection Forces Subcommittee on the posture of U.S. Transportation Command.

Today, the subcommittee will hear from the commander of Transportation Command [TRANSCOM] and the administrator of the Maritime Administration [MARAD] on how well the Department of Defense is postured to meet the heavy and sustained logistical demands of a major conflict.

While TRANSCOM has operational control of some Air Forceand Navy-owned aircraft and ships for this mission, a major contingency will require the substantial assistance of the U.S. commercial air and shipping fleet.

Further, TRANSCOM must rely on the military departments to budget for critical organic assets, such as ships, planes, and ports, and the commercial air and shipping industry to willingly participate in defense logistical programs. TRANSCOM can influence but cannot direct Army, Navy, and Air Force budget decisions nor commercial industry business decisions.

We understand that there are some deficiencies in the complex system that must be addressed. Among these are the Air Force's aging tanker fleet and some near-obsolete vessels that are part of our surge sealift fleet.

Today we welcome the witnesses' perspectives on these issues and any recommendations they may have.

Before I introduce the witnesses, I turn to the distinguished ranking member of the Readiness Subcommittee, the gentlelady from Guam, Congresswoman Madeleine Bordallo, for her opening statements.

[The prepared statement of Mr. Wilson can be found in the Appendix on page 33.]

STATEMENT OF HON. MADELEINE Z. BORDALLO, A DELEGATE FROM GUAM, RANKING MEMBER, SUBCOMMITTEE ON READ-

Ms. BORDALLO. Thank you very much, Mr. Chairman.

General McDew, Mr. Buzby, thank you for being here today. Gentlemen, as a resident of Guam, I am very familiar with the importance of a resilient logistics chain, and I do thank you for your efforts to bolster support to our military forces around the

These committees remain advocates to ensure that TRANSCOM and MARAD are provided the resources they need to deliver fullspectrum global mobility solutions to geographic combatant commanders in both peace and war.

While both agencies have been supporting ongoing military operations for decades, the conflicts have generally been permissive to

air and sea sustainment.

I understand that CENTCOM [U.S. Central Command] requirements have burdened the services, but I am concerned that we may be slow to react to potential high-end threats, or inadequately planning for and programming the capabilities needed to sustain the joint force in a contested environment.

So that said, I look forward to hearing from you today about your priorities, areas of concern, and how the fiscal year 2019 budget request will address these issues and balance current force sustainment, while bridging future capability gaps.

And with that, Mr. Chairman, I yield back.

Mr. WILSON. Thank you, Congresswoman Bordallo.

We now proceed to the distinguished chairman of the Seapower and Projection Forces Subcommittee, a great friend of the military of the United States, Congressman Rob Wittman of Virginia.

OPENING STATEMENT OF HON. ROBERT J. WITTMAN. A REP-RESENTATIVE FROM VIRGINIA, CHAIRMAN, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. WITTMAN. Thank you, Chairman Wilson.

And I want to welcome General McDew and Admiral Buzby, and thank them for your time and effort that they have made on this extraordinarily important issue.

And I also want to thank Chairman Wilson for offering to have this joint subcommittee hearing today. I believe there are a number of overlapping issues between our two subcommittees, and I look forward to working with the gentleman from South Carolina to move these issues through the NDAA [National Defense Authorization Act] process.

Gentlemen, I think the Department of Defense [DOD] needs to reassess its commitment to a core military competency: logistics. At the heart of any successful campaign is a logistic train that provides the bullets and butter to the combatant forces in a timely

While high-profile acquisition programs are prioritized, littleknown capabilities are left to continue their operations with little funding. It is obvious to me that we need to turn our attention to airlift and sealift elements of our military strategy and take immediate steps to improve our logistics capabilities.

Today, we have a surge sealift force that averages 42 years old. Certain officials have referred to this sealift force as the last bastion of steam-powered technology in the world. In fact, by 2020, TRANSCOM will own almost all of the steam-plant ships in the world. This is not a moniker that I relish, but it is a good example of the plight of our sealift forces.

While MARAD has done an extraordinary job of maintaining and activating select Ready Reserve Force ships, the reality of a full ac-

tivation of this aged fleet is, at best, circumspect.

I am equally perplexed that this military has not to date presumed attrition in their auxiliary force requirements. It is pretty obvious that we have overly optimized our forces for peace. As envisioned by the National Defense Strategy, it is time that we shift our focus to get ready for a future of a potential conflict.

I look forward to General McDew's assessment as to the impacts of the National Defense Strategy on the mobility forces. After meeting with General McDew last week, it is my understanding that an updated report on auxiliary forces, to include attrition, will be completed by the fall.

As to our strategic airlift capabilities, today we depend on a much smaller fleet to move cargo, personnel, to medevac the

wounded, and to support disaster relief around the globe.

For example, the last hurricane efforts with Hurricane Maria and Irma left us with an insufficient strategic airlift capability available to move troops and cargo to Afghanistan in a timely manner, threatening the Department of Defense's ability to blunt Taliban territorial gains. So when we get spread thin, the ability for us to do all the jobs gets stretched to the breaking point.

I am concerned that outdated planning assumptions need to be reviewed. I believe that assumptions made for an ongoing mobility capability and requirements must take into account the logistical

needs of a future dispersed battlefield.

Furthermore, the administration has made it clear that it wants to increase Army and Marine Corps force structure that will drive even greater mobility requirements. Additionally, areas are becoming less permissive for civilian aviation's operations to deliver these additional soldiers and Marines to their areas of operation, increasing demands on an already insufficient fleet of strategic lift aircraft.

Consequently, I believe it is critical for TRANSCOM to thoroughly consider how to best increase strategic airlift capacity and its ability to operate in contested environments around the globe.

At the conclusion of World War II, Fleet Admiral Ernest King reflected on our success and our shortcomings. He indicated, "The war has been variously termed a war of production and a war of machines. Whatever else it is, so far as the United States is concerned, it is a war of logistics."

It is time that we reflect on Admiral King's assessment, an assessment that was paid for with the blood and sweat of the Greatest Generation. Today, we need to ensure that our logistics capability will provide the lift required in a timely manner to support our military objectives.

I thank Chairman Wilson for working with the Seapower and Projection Forces Subcommittee on this important issue. And I yield back the balance of my time.

The prepared statement of Mr. Wittman can be found in the Ap-

pendix on page 34.]

Mr. WILSON. Thank you, Chairman Rob Wittman.

I am grateful today to recognize our dedicated witnesses. We have extraordinary people who are with us today and we appreciate you taking time to be here.

We have General Darren McDew, Commander, U.S. Transportation Command; and Rear Admiral (retired) Mark Buzby, the ad-

ministrator of the Maritime Administration.

As we begin, we want to remind the witnesses that your full written statements will be submitted to the record and that you summarize your comments to 5 minutes or less.

And, General McDew, we are grateful to begin with you, and look forward to your opening statement.

STATEMENT OF GEN DARREN W. McDEW, USAF, COMMANDER, U.S. TRANSPORTATION COMMAND

General McDew. [Turns on microphone.] I forget that every time. Thank you. And good morning, Chairmen Wilson and Wittman, Ranking Members Bordallo and Courtney, and distinguished members of the subcommittees. Thank you for this opportunity.

As I have told some of you during office calls, I don't look forward to testimonies. I am an introvert. It is not one of my favorite things to do. But it is also what I have told my staff is one of the most important things I do every year. So thank you very much for the

opportunity.

It is also an honor to be sitting here next to a great shipmate and a talented leader, Admiral Buzby. I rely on his sage advice to ensure that the U.S. maritime industry remains postured and prepared to support our national defense.

So thank you for the opportunity to represent the men and women of the United States Transportation Command, who are actually watching this morning, because they want to make sure that I don't get this wrong.

Those men and women who make up this command underwrite and I say it again—underwrite the joint force's lethality and with an unparalleled expeditionary capability. And just to say it shortly,

I am very, very proud of them.

USTRÅNSCOM's total force team works together every day to provide our Nation with a broad range of strategic capabilities and options, options that many nations don't have. But they don't do it

I wish every American understood how much we rely on the Nation's truck drivers, conductors, commercial pilots, mariners, stevedores, and much more to meet national defense requirements.

USTRANSCOM is a global warfighting command with functional responsibilities and expertise, and we take it proudly. We move and sustain the joint force, but we are also responsible for the expansive joint deployment and distribution enterprise.

I can say with full confidence that today, USTRANSCOM stands ready to deliver on behalf of the Nation's objectives anywhere, at any time.

However, as I said last year, I remain concerned about the future. As we refocus our efforts on great power competition, we are faced with adversaries who want to challenge our democratic values and undermine our security and the existing balance of power.

In this environment, the logistics enterprise must always be ready. We must restore readiness and increase lethality across the joint force. The resources necessary to transport and sustain America's military must keep pace.

Our ability to deploy decisive force is foundational to the National Defense Strategy. The size and lethality of the force is of little consequence if we can't get it where it needs to go when we want it there.

The 2018 National Defense Authorization Act directed a mobility requirements study, and in fact, the current inventory of mobility assets is sufficient enough to support combatant commander requirements.

This study will consider the current strategic context and use updated assumptions, assumptions such as multi-domain contested environments, attrition of mobility assets, and the outcomes of the study will provide valuable insight to ensure we are able to respond to tomorrow's needs as well.

But USTRANSCOM can't get there alone. We need the weight of the Nation with us and behind us to ensure that our diplomats, when they go to the negotiating table, they are negotiating from a position of strength.

However, one of the greatest threats to that strength is a result of illicit activities in the cyber domain. Today, our adversaries don't have to stop us with bombs and bullets. All they have to do is slow us down with ones and zeroes.

That is the challenge I would say of our time. We have got to get smarter as an industry and as a nation, not only about how we protect ourselves, but how we protect each other.

Cyber defense is more than just security, it is about, for me, mission assurance. It is not just a DOD issue, it is a national issue. From safeguarding our intellectual property to guaranteeing the integrity of our elections, we have all got to be together.

We also face challenges in the physical domain. The current mix of Active to Reserve Component resources in USTRANSCOM means that the command relies on the Reserves and National Guards to fulfill our wartime requirements. For the past three decades, Reserve Component assets have been used to sustain day-to-day operational requirements, a function for which they weren't properly resourced or structured.

Meeting the challenges of the future may require adjustments to mobilization authorities or force mix to ensure we have access to vital capacity currently resident in our Reserve and Guard.

Our patient movement system also presents challenges. Although USTRANSCOM operates the most robust patient movement system in the world, we lack sufficient capacities to surge for large-scale conflict with mass casualties.

The combination of insufficient personnel, equipment, infrastructure, and capacity for patient movement significantly decreases the likelihood we will see the same high-level survival rates that we have all come accustomed. We continue to work with the services, the Joint Staff and the national health enterprise to address these challenges.

Finally, we are able to maintain our go-to-war capacity, we must ask ourselves as a nation who are we and who do we want to be? The U.S.-flagged fleet has steadily declined since World War II,

from a little over 1,200 ships to 81 remaining today.

That degradation correlates to a decline in qualified merchant mariners. They are the backbone of our industry. If we continue to lose this capacity, I am concerned what it will mean for how we project our force in the future.

Again, thank you very much for this wonderful opportunity to present the case. And, as you said, the rest of my remarks will be

for the record. Thank you.

[The prepared statement of General McDew can be found in the

Appendix on page 36.]

Mr. WILSON. And, General McDew, thank you very much for your statement. And we appreciate your service so much for our country.

We now proceed to Rear Admiral Buzby. Please proceed with your opening statement. Thank you for being here.

STATEMENT OF RADM MARK H. BUZBY, USN (RET.), ADMINISTRATOR, MARITIME ADMINISTRATION

Admiral Buzby. Morning, Mr. Chairman, Chairman Wittman, Ranking Members Courtney and Bordallo, and members of the subcommittee. Thank you for inviting me to this hearing to discuss MARAD's role in meeting DOD's strategic sealift requirements.

Our Nation relies on maritime sealift capabilities to deploy and sustain military forces, respond to national emergencies, and provide humanitarian assistance at home and around the world. These assets include a core of government-owned vessels and a larger fleet of privately owned, commercially operated U.S.-flagged vessels, intermodal systems, and mariners who operate them.

During a crisis, these vessels and mariners would transport 90 percent of the equipment and supplies used by our military around

the world.

The government-owned fleet of 61 strategic sealift vessels includes 15 ships operated by Military Sealift Command and 46 in the Maritime Administration's Ready Reserve Force, the RRF. These ships constitute the core of our surge sealift fleet and deliver military equipment and supplies on short notice during major contingencies. The average age of this fleet is 43 years, well beyond the designed service life of these ships.

Given the age of the fleet, the readiness of the RRF is a constant challenge. MARAD is collaborating with our DOD partners to address maintenance, repair, and modernization of the existing fleet,

while we finalize a long-term recapitalization strategy.

The RRF is a component of the National Defense Reserve Fleet, or the NDRF. The NDRF includes vessels used to train merchant mariners and to provide response to natural disasters. These ships

supported relief activities following Hurricanes Harvey, Irma, and Maria, and as they have in past crises, supplying citizens and first responders with housing, meals, logistical support, and relief supplies.

In their training role, these six NDRF vessels serve as school ships for more than three-fourths of the entry-level merchant marine officers who graduate annually from the six State maritime academies.

Like RRF vessels, several of these school ships are at the end of their service lives. To ensure the availability of safe and efficient vessels to meet mariner training needs, the administration is amending the President's budget request to include \$300 million to replace two of these oldest training vessels.

The U.S.-flagged commercial fleet is absolutely critical to the U.S. military's sealift objectives, providing long-term sustainment

during military deployments.

Access to this fleet comes primarily through the Maritime Security Program, the MSP, which supports a privately owned U.S.-flagged and U.S.-crewed fleet of 60 militarily useful commercial ships operating in international trade that are available to transport government supplies when called upon.

Critically, the MSP helps to ensure the availability of an adequate pool of highly trained mariners to crew our government-

owned RRF fleet.

Unfortunately, the U.S.-flagged commercial oceangoing fleet is in serious decline, with just 81 vessels in deep-sea international trade. Qualified U.S. mariners are needed to operate the surge fleet of 61 government-owned cargo ships in a crisis.

Yet, because of the drastic reduction in the size of the U.S.-flagged oceangoing fleet, the number of qualified mariners now available to crew a prolonged sealift mobilization is at a historic low.

MARAD recently assessed the size of this pool needed to support the U.S.-flagged fleet in a major contingency and estimated a shortfall of 1,800 mariners for a long-term sealift effort.

As Maritime Administrator, I take seriously my charge to ensure that we have enough U.S.-flagged ships and mariners to serve our Nation's commercial and military sealift requirements. I am working closely with USTRANSCOM, the Military Sealift Command, and the U.S. Coast Guard and the commercial maritime [industry] to address these issues.

Access to cargo is critical for shipowners to compete globally while operating under the U.S. flag and employing U.S. mariners. Cargo preference laws keep U.S.-flagged operators competitive by requiring U.S.-flagged vessels to transport significant portions of cargoes purchased with Federal funds.

In addition, the Jones Act U.S. build, ownership, and crew requirements support mariner jobs and give us access to domestic maritime assets needed in times of war or national emergency. It also serves national security priorities by supporting U.S. shipyards and repair facilities that produce and repair American-built ships. U.S. mariners on Jones Act vessels serve as another layer of national defense.

Thank you for this opportunity to discuss these critical programs and the contribution of the U.S. merchant marine to augment DOD's sealift capabilities. I look forward to working with you to advance the maritime transportation interests of the United States, and I am happy to take any questions you may have. Thank you.

[The prepared statement of Admiral Buzby can be found in the Appendix on page 62.]

Mr. WILSON. And, Admiral Buzby, thank you very much for your

We will now proceed for each subcommittee member to adhere to the 5-minute rule. And Tom Hawley is going to be keeping—beginning with me—the 5-minute so that—we may be having votes as early as 10 o'clock. So we want to be respectful of this for each member of the subcommittee.

And, General McDew, your testimony notes a legal restriction that hampers your ability to manage the air tanker fleet, namely a provision in the Defense Appropriations Act that prohibits TRANSCOM from controlling tanker assets now assigned to PACOM [U.S. Pacific Command] and EUCOM [U.S. European Command], even if their operational priority is lower.

Given the state of our tanker fleet, this restriction is a serious matter. If you could highlight this consequence for the subcommittees?

General McDew. Gladly, Mr. Chairman.

In my responsibilities as a global combatant commander, one of the things that I relish is the fact that I have authority to move assets around the globe. My responsibility to the Chairman [of the Joint Chiefs of Staff] and the Secretary [of Defense] is to set the globe for logistics and ensure that we are in balance, and when we are out of balance be able to shift those assets to the place and point of need. We can do that with every other asset, except those that are restricted right now by law.

And with those other assets, we can move from one theater to another, because if we could keep all the enemy combatants in one geographic commander's region and put a fence around it, and they were able to fight just inside that geofencing, that would be nice. But today's world doesn't allow that.

Mr. WILSON. Thank you very much.

And for each of you, your testimony highlights the alarming decline of the U.S.-flagged commercial shipping fleet. And it is incredible, and I hope you go over that specifically. What can be done to maintain a healthy U.S. Merchant Marine and the commercial fleet?

Admiral Buzby. Mr. Chairman, it comes down to cargo. We have heard it been said many times, cargo is king. Without cargo, there is no need to have the ships, and without the ships, there are not the mariners.

So to have cargo available for U.S.-flagged vessels to carry, that is the root of the problem. And whether we do that through cargo preference or through bilateral trade agreements or freeing up cargo that is available, that is the root of the problem.

Mr. WILSON. And specifically how many U.S.-flagged ships are there?

Admiral Buzby. Right now in international deep-sea trade, we have 81 U.S.-flagged ships.

Mr. WILSON. And this has declined from-

Admiral Buzby. Well, just as recently as 2012 we had 106.

Mr. WILSON. So it is a very precipitous decline.

Admiral Buzby. We had a 27 percent decline just in 5 years.

Mr. WILSON. That is stunning, and the American people need to know that. Thank you.

Admiral Buzby. Yes, sir.

And General McDew, what is your assessment of the Air Force's progress in modernizing the air tanker fleet? Is the current plan

reachable or can they move faster?

General McDew. I would like to have a reasonable answer to this, Chairman, and that is, what I look at is the overall capacity. Modernizing is important because the backbone of that fleet is 61plus years old. When I flew them as a young lieutenant they were old. They are considerably older today, because I am no longer a young lieutenant.

So modernizing faster would be an answer, but the budget realities and the realities of bringing on a new weapons system are what they are. So we have got to continue to look at how we maintain them, how we fund that maintenance, because that is also a

part of attrition as I see it.

People talk about attrition as being kinetic and blowing things up or things falling out of the sky; not adequate maintenance can cause us to have attrition in that fleet.

So what I applaud the Air Force of doing is putting a program together that gets us to recapitalization. We have got to press that harder to maintain the capacity that we have right now.

Mr. WILSON. And I appreciate you raising that 51 years of age, some of the aircraft. The health and safety of our crews are a great concern, so however we can be working with you.

And, General McDew, we understand that you are concerned about cyber vulnerabilities and your ability to communicate effectively with commercial partners in a time of conflict. What are you

doing to address this risk?

General McDew. Chairman, I want to applaud most of our industry partners for coming to the table with us regularly to involve themselves in our war games. I applaud the fact that they have accepted some of the—well, they have accepted all the things we have put in our contracting language to bring up the level of cybersecurity standards. What we have got to get to is a better standard for them.

But I like the fact that they are working with us to improve all of our ability to protect ourselves. I would ask that the Nation take a deep look at itself and decide what we are going to do as a Nation about cybersecurity awareness and standards.

Mr. WILSON. Well, it is ever-changing and your input will be so important as we proceed to address these crucial issues. Thank

And thank both of you for being here.

We now proceed to Congresswoman Madeleine Bordallo of Guam. Ms. BORDALLO. Thank you, Mr. Chairman.

General McDew, when you visited my office last week, you mentioned that TRANSCOM is starting to prepare for logistics in a contested environment. Now, can you speak briefly to how TRANSCOM models for attrition in varying threat environments? And then please expand on how TRANSCOM is adjusting their priorities with funding and training to be prepared to support a conflict with peer adversaries in the Pacific region?

General McDew. Congresswoman Bordallo, I would love to, because I will tell you, I am very proud of what the men and women of USTRANSCOM have done over the last couple years in raising

this level of attention to the idea of contested environment.

Contested environment, we believe now, is woven into everything we think about. Unfortunately we are still in our nascent place

with this realization. And so our modeling is new.

This mobility capability study that we have been directed to do in the last NDAA will now include attrition, contested environment concerns for the very first time after multiple capability studies. And we have got an analysis center that is a crown jewel of this country, actually, to be able to do that kind of modeling for any place on the world, to include the Pacific region.

Ms. BORDALLO. Thank you.

General, another question. The administration has discussed proposing a large increase in national infrastructure spending. Now, what would be your top priorities for infrastructure improvements, as the TRANSCOM commander, in order to benefit our national defense needs?

General McDew. Well, I like the fact that if I say out loud, infrastructure is part of national security. The National Security Strategy is a really good step and it starts to get the American public to look at one thing. It is a national security strategy and not a Department of Defense security strategy.

Our rail and roads infrastructure, our bridges, help us get from fort to port. That port then helps us get from port to port and then

the onward movement into the place of need.

So all of that infrastructure is part of national security: trucking, rail, and our seagoing infrastructure. So it is very, very important to us.

Ms. BORDALLO. Thank you. Please remember the Pacific.

And my next question is for both of you.

I understand that a large portion of our logistics rely on commercial partners, most of which operate on unclassified IT [information technology] networks. So what steps are you each taking to, first, bolster your network security internally and with corporate partners; and, secondly, ensure that your logistic chains remain resilient during network degradation?

General McDew. Well, I will speak quickly to the Department of Defense has a very strong program through U.S. Cyber Command to bolster and fortify the defense network, the DODIN [Department of Defense Information Network]. And so I am relatively confident that we are doing a good job there, but we are learning every single

day.

My concern, because so much of it is outside and we rely heavily on our commercial partners, the lack of a national standard, the lack of national enforcement means that I need the Nation's help to ensure that not just the defense industrial base, the people that make our widgets or the people that we count on to move our goods and services around, are as secure.

Admiral BUZBY. Ma'am, thank you for that. It is a very challenging program, as General McDew pointed out, because we deal primarily with commercial operators outside of the DOD network security, if you will. It is a huge challenge.

Many of the companies who operate with us, as the general mentioned, are under contract. Part of their contract to operate with the government is to meet a certain security standard, and they

have been very diligent about doing that.

We have set up forums. The National Defense Transportation Association has a forum on the air side and on the sealift side to talk about how we share information. So that if we see an attack on one particular carrier that we can share that information and also figure out how to fight through and maintain the capacity to provide the service to the government.

It is going to be an ongoing effort. But I think awareness is number one and communication amongst ourselves is, kind of, key to kind of get where we have to go, but we have a long way to go.

Ms. BORDALLO. Thank you very much.

And one last point, General. Čan you describe some of the challenges you have that the geographic commanders aren't faced with? And how do you balance mobility assets between theaters to ensure the DOD's readiness to respond to contingencies? And are there any barriers to this responsibility?

I only have about 5 seconds left, so—

General McDew. The geographic combatant commanders are awesome people and they have a responsibility to fight a fight in their regions. My responsibility is across the entire globe.

We are not a balanced force. We have more force structure towards the east than we do in the west, in the Pacific. That means that we have to be able to take resources from one area and apply them where they are needed most based on the priorities set by the President and the Secretary of Defense. So that is a bigger responsibility there.

Ms. BORDALLO. Thank you.

And I yield back, Mr. Chairman.

Mr. WILSON. And thank you, Ranking Member Madeleine Bordallo, who we always appreciate, points out that the strategic location of the patriotic territory of Guam.

[Laughter.]

Mr. WILSON. It is in the Pacific.

Mr. WITTMAN. That is right.

Mr. WILSON. So thank you.

And we are grateful now for the chairman of the Seapower and Projection Forces Subcommittee, Rob Wittman of Virginia.

Mr. WITTMAN. Thank you, Mr. Chairman.

And before I begin, General McDew, I would just get you, if you would, to place the microphone a little more directly in front of you. That will be a help, so, fantastic.

Listen, I wanted to get, General McDew, your perspective, and also Admiral Buzby, as far as how we think in a more current

framework about sealift. And I want to turn to some direct things

in your testimony that you point to.

And you said, the dwindling size of the domestic U.S. intercontinental—or, excuse me—intercoastal shipping fleet demands that we reassess our approach to ensure that the U.S. retains critical national security surge sealift capabilities. We also may need to rethink policies of the past in order to face an increasingly competitive future.

I wanted to get you to drill down a little bit on that. Those are interesting concepts about what we do to reassess our approach, to

rethink our policies.

I wanted to get your perspective and, Admiral Buzby, your perspective on what would that rethinking and reassessing be? And what would you suggest to us where the redirection needs to take place in order to get the right policy for you to pursue this modernizing approach?

General McDew. Well, I like the fact that I am going to have Admiral Buzby here to really call a friend on this one, because he is

a much smarter human.

I will take it from the perspective of a warfighting combatant command in the fact that we have a power projection responsibility. But if I step back even greater and I say the Nation, I still believe, is a maritime Nation. But finding the evidence in our laws and policies in what we do, to convict us in a court of law might become difficult if you start to look.

And some of the programs we have out there that had well intentions in the beginning ought to be reviewed to see if we are applying all the things that we can apply, using all the rheostats that

we can to actually make the implementation work.

We have got rules that say you must use the Defense Transportation System. Applying it and making sure that it is actually being enforced is important as well. Some of that will get to some of the cargo problems that we are facing.

Admiral BUZBY. Yes, great question, sir. Thank you.

I think some of the things that really kind of have to fall in place probably going forth is, again, cargo. That is key. I keep harping back on that because it is so fundamental.

Mr. WITTMAN. Sure.

Admiral Buzby. We have to be able to carry more of it. But the capacity of our Nation to produce vessels, to repair vessels, to maintain vessels is also really, kind of fundamental to that security piece of it as well. Absent that, you know, we are not going to get very far should we get into a dust-up and we have to start producing large oceangoing vessels again. Our capacity is kind of limited to that.

You know, there are ways that we can carry more of our domestic cargo right now, get it off the roads. Our Marine Highway Program is a great way to do that. You know, our waterways, we are blessed with wonderful inland waterways and coastal waterways that are, by and large, underutilized and could carry a lot more freight with a program that, you know, has more vessels on there and that could be militarily useful.

So I think all those are things that we need to think harder about.

Mr. WITTMAN. Very good. I appreciate that. Those are policies we

need to be emphasizing, I believe.

General McDew, I wanted to talk to you a little bit about airlift. As we know, the C-17 line is terminated. We have 25 C-5s that are now being sent out to the Aerospace Maintenance Regeneration Group out of Tucson, Arizona, better known as the boneyard.

We know where the demand is for airlift. We know that we could reconfigure those aircraft to modernize them. And the Air Force

has put a price tag on that of about \$5.6 billion.

I wanted to get your thought about where we are with airlift risk and should TRANSCOM consider increasing its airlift capacity by returning these aircraft to service?

You talked about the need for military airlift, different from the CRAF [Civil Reserve Air Fleet] program and operating in a contested environment. Give me your perspective about what we can do, because this seems like a faster way, rather than building new aircraft, especially since we don't have a hot production line for lift aircraft, to look at these C-5s.

General McDew. Well, one of the things I am very careful about in my role, is not getting into too much of the lane of the service chiefs and service secretaries. Their responsibility, obviously, is to organize, train and equip and provide those assets. And there are

a lot of ways to skin this cat.

And they have got top-line concerns, in the fact that a lack of a long-term regular budget on time is probably the biggest threat to any of that that we face. You can't do much of the things that you suggest that might be answered, without a budget on time year after year. So what I would say is we need to be able to look at all those things.

But what we are doing, and the things we can control, is increasing the use of commercial where we can, making sure that we are more effective and efficient with the use of the gray tails and making sure that we are not overusing them when we could use other

Mr. WITTMAN. Thank you, Mr. Chairman. I yield back.

Mr. WILSON. And thank you, Chairman Wittman.

We now proceed to the Seapower and Projection Forces Subcommittee ranking member, Congressman Joe Courtney of Connecticut.

Mr. COURTNEY. Thank you, Mr. Chairman.

Again, I apologize to you and the witnesses. I was at an Education Committee matter this morning and got here a little late.

So I would ask, Mr. Chairman, if I could have my opening statement just entered for the record?

Mr. Wilson. And it shall be accepted.

[The statement referred to was not available at the time of print-

ing.]

Mr. COURTNEY. And I want to yield my time to Ms. Hanabusa or Mr. Brown, whoever was here before me on our side because they were more punctual than I was.

Mr. WILSON. Hey, you had important duties with the Education Committee, okay?

Mr. COURTNEY. Okay.

Mr. WILSON. And Congresswoman Hanabusa.

Ms. Hanabusa. Thank you. Thank you, Mr. Chair.

Admiral Buzby, I was kind of taken by the statements that you made. You said early on in your testimony that cargo is very important and that is why we are seeing a reduction in basically what we have available. Then you also said that you need vessels that are militarily useful.

So let me try and understand this. Cargo, for most part now, commercially, are transported like in container ships. I mean, the

containers are stacked really high.

Military useful, I suppose, because of your testimony as well, the two used ships that you plan to purchase are really roll-on/roll-offs.

Admiral Buzby. Correct.

Ms. Hanabusa. So the question I have is that when you talk about cargo and you talk about military useful, are we talking about the same types of commercial vessels that you need?

Admiral Buzby. Primarily what we need, or what General McDew needs to move his force, are roll-on/roll-off ships primarily.

You know, the force, our Armed Forces are primarily rolling stock, you know, tanks, trucks, vehicles, that sort of thing that move much more easily by having them roll up a ramp and into the belly of a ship as opposed to being lifted onto the deck of a cargo ship, something like that.

We still have need for container ships to move ammunition and other, you know, bulk sort of supplies, but roll-on/roll-off ships are

really the vessels of choice these days.

Ms. Hanabusa. So as I watched the different kinds of ships that are being built within the United States—I am talking about Jones Act ships that qualify on all three criteria—they tend to look more like container ships than they do roll-on/roll-offs. Would you agree with me on that?

Admiral Buzby. I would. Container ships and tankers, primarily—

Ms. Hanabusa. Right.

Admiral Buzby. Have been the larger ships that have been.

Ms. Hanabusa. Have been the ships.

Admiral Buzby. Right.

Ms. Hanabusa. So almost by the needs of the general, you are basically saying that it is the MSP-type vessel, which is one that doesn't have to be built in America, it just has to be, arguably, flagged, which may mean 50 percent-plus of the board of directors plus maritime. But mariners are what we all want—

Admiral Buzby. Right.

Ms. HANABUSA [continuing]. Working anyway. That those ships tend to meet your criteria for General McDew. Am I correct?

Admiral Buzby. As it stands today, yes, ma'am, that is correct. Ms. Hanabusa. Now, let me also ask you. We do know that you have a MSP stipend that you give ships for basically being available. And I think it is about—you said it is now \$3.6 million. I think we are authorized up to \$5 million or something like that.

Admiral Buzby. Authorized up to \$5 million, yes, ma'am.

Ms. HANABUSA. So how many ships are receiving stipends who may not be used? Do you have a number?

Admiral Buzby. Well——

Ms. HANABUSA. In other words, not called up but they do receive stipend.

Admiral BUZBY. There are 60 ships enrolled in the MSP program today, which is——

Ms. Hanabusa. Right.

Mr. Buzby [continuing]. The authorized number.

Ms. Hanabusa. Right.

Admiral BUZBY. And all 60 of those ships are receiving their stipend.

Ms. Hanabusa. I understand that. I am saying how many are actually called into service?

Admiral Buzby. Well, right now, we have not called any into service. I mean, there are none currently called into service to do a sealift mission. They are also in liner service—

Ms. Hanabusa. Right.

Mr. Buzby [continuing]. In their normal service, and they are

carrying government cargoes.

Ms. Hanabusa. So if I could ask that you provide for me, through the committee chair, a list, in a year, the number of ships—or you can go 1 to 60, how many receive the stipend and how many were actually called into service. Because that is what we are paying them for.

Admiral Buzby. Yes. I think call into service may be the thing. They are all carrying government cargo. They are all carrying government cargo.

Ms. Hanabusa. Military cargo. Military cargo and for what length of time? In other words, what I want to know is whether we have a bunch of these ships that may receive a stipend, may be called up maybe once in 1 month, or 1 week, or something like that. That is what I would like to know. I want to understand the scope of the demand that we have and how we are meeting that demand.

And I would also like to have, with the chairman's position, a breakdown as to where they are, because General McDew said something very interesting. He said, the demand is in the east more than the west, and he defined Asia as the west. And for some reason, as our theater seems to focus to Asia, I am very curious about that.

And I am out of time, so with the chairman's permission, if you can put it in writing and return it.

Thank you, Mr. Chair, and I yield back.

Admiral BUZBY. I will get that back to you, ma'am.

[The information referred to can be found in the Appendix on page 71.]

Mr. WILSON. And thank you very much, Congresswoman Hana-

We now proceed to Congressman Duncan Hunter of California.

Mr. HUNTER. Thank you, Chairman.

Gentlemen, thank you very much for being here.

Let us stay on the MSP, if you don't mind? We authorized \$300 million. The administration only asked for \$214 million. Let us start with that. Why is that? If it is so important, why would they underfund what we authorized and funded?

Admiral Buzby. Mr. Hunter, I would start by saying the Department and MARAD greatly value and understand the importance of the Maritime Security Program. Absolutely. It is critical to our national security. It is critical to our sealift mission.

It came down to a very difficult budget season, and we had to make some very, very difficult choices, and that is where it ended

Mr. Hunter. So the reason that it went to \$5 million per ship is because they couldn't do it anymore at \$3.5 million or \$3 million a ship. Is that correct?

Admiral Buzby. That is-

Mr. HUNTER. You had ships and mariners dropping out of the

Admiral Buzby. I don't know that is the case.

Mr. HUNTER. That is the case. You had multiple ships drop out. You had some space there. We added the money and then they were able to do it again.

Do you have any estimates, either of you, any estimates of what it would cost if we didn't basically lease those ships, to build that out organically and to maintain 60 ships that were able to do what the MSP ships do? Roughly, what do you think that would cost?

Admiral Buzby. Between the ships and the networks, I don't know that I have ever seen a number. It would be a very, very, very high number.

Mr. Hunter. And the mariners, just guess, what do you think it would cost? To build 60 ships, to have them on call for-

Admiral Buzby. About 2,400 mariners that, you know, would not

Mr. HUNTER. So billions and billions and billions?

Admiral Buzby. It would be a lot, yes, sir. Mr. Hunter. A lot. And this is \$300 million a year. I think that is a good lease on our security to have those ships available.

Let us talk about Jones Act really quick. I would just like you to talk about it. Let me quote you, General McDew, what you said last year. Quote, Without the Jones Act, without the Maritime Security Program, without cargo preference, our ability to project the force is in jeopardy. Is that still the case or has that changed?

General McDew. Without the rheostats that you provided in Congress, those rheostats, we would be in jeopardy, because we would lose mariners, and we would lose ships in international trade. It is still the case.

Mr. HUNTER. Can you talk about the Jones Act and what it

General McDew. The Jones Act-

Mr. Hunter [continuing]. For the industrial base, for the mari-

General McDew. Yes. For me, the Jones Act, from a warfighting perspective, is all about the mariners and the ability to keep mariners trained and ready to go to war.

The ships that are in the Jones Act are also useful, but the primary thing we get from the Jones Act are the mariners. And those mariners have been with us in every conflict that I can imagine, and suffered great loss, and still stay with us.

Mr. HUNTER. Thank you.

Admiral Buzby.

Admiral Buzby. Absolutely, sir. The Jones Act really is the linchpin. It is foundational to our merchant marine as it is today. It is

not just the—it is the ships.

It is the mariners, which are critical. And it is the infrastructure that supports the shipbuilding and ship repair part of the industry and all of the supply chain that impacts that, because that all has impact on our government shipbuilding programs as well. The costs of all of those and the availability of shipbuilders are greatly impacted by that as well. So it has far-ranging impact.

Mr. HUNTER. So two things. I think it would be interesting to see

Mr. HUNTER. So two things. I think it would be interesting to see a study, even a down-and-dirty one, on what it would cost to basically have a Ready Reserve Fleet of MSP ships. What would that cost to have those 60 ships sitting around, waiting to be used, if they weren't doing commercial stuff or carrying government cargo?

Two, I think it would be interesting to look at how many shipyards you would lose and how many mariners you would lose in CONUS [continental United States] if you got rid of the Jones Act. The Jones Act is under constant fire, wrongly. But it would be interesting to see how many small shipyards and medium shipyards—they might make intermodal ships and barges, but they still bend steel.

They still have people that know how to build ships and power plants and that kind of thing. It would be interesting to see what we would lose there, what that deficit would be if we said fine, we are going to buy all South Korean ships or French ships or whatever. That would be interesting.

And even if you did it down-and-dirty, I think it would be great, not just for this committee, but I also chair the Maritime and Transportation Subcommittee on the Transportation Committee,

right, Maritime and Coast Guard.

So those would be two interesting things where we could see the massive gap, the massive hole that would be left if you got rid of the Jones Act, if you underfunded the MSP, and you had ships start falling out of that, what that would cost to make that up organically.

But thank you both for your service, and thank you for being here.

I yield back.

Mr. WILSON. And thank you very much, Congressman Hunter. With your background, this is very helpful.

And we proceed now to Congressman Anthony Brown of Maryland.

Mr. Brown. Thank you, Mr. Chairman.

Thank you, General McDew and Admiral Buzby, for your appearance here today.

Let me start, General McDew, by informing you that we are doing just well at Joint Base Andrews, although we miss your leadership

I want to turn your attention to the Pacific Command, and more specifically, to the Korean Peninsula. I have had an opportunity to speak with a number of your peers, your colleagues, General Brooks last week, Admiral Harris, who is testifying before the committee. This afternoon, I will be speaking with General Brown.

And my focus has been on NEO, noncombatant evacuation operations. It is my understanding that General Brown has, sort of, the lead on coordinating, planning that effort. But no doubt TRANS-COM is going to play an important role, as you are, you know, bringing forces and materiel to the fight, I am assuming. And I would like to hear more about what role you will play in supporting NEO.

I have concerns about our level of planning and coordination, tabletop exercises, rehearsing.

Can you tell me, specifically, what TRANSCOM's role will be in NEO operations? What the level of readiness is? What our posture is? What challenges you are seeing right now in supporting PACOM's NEO operations?

General McDew. The NEO operation on the Korean Peninsula would be a challenging undertaking, particularly if you get to several issues. One is how much indications and warnings there might be for a fight of that magnitude; the number of people that could be evacuated prior to hostilities starting. And you have different avenues off the island before that happens. Once a conflict erupts, those avenues start to diminish.

If we were starting to project a force from the continental United States to help fight a fight on the Korean Peninsula, that might have to be interrupted to use those same assets to remove people from the peninsula, if that were to come to pass.

Step back even further. Our network of hospitals and things that we would use here in the continental United States to regenerate a force or to care for sick, ill and injured is no longer what it was. So that network of hospitals we would use to come back through the CONUS has been impacted. We are working with national health organizations and others to see what we can do to challenge that current reality.

If we had had this happen during flu season, many of the beds that were taken up in our hospitals in the continental United States were flu victims, and we would start to max out our ability to care for those people.

So our network of hospitals, our ability to get warning and get people off the island without using our assets, to not disrupt the flow of military goods and people to the island, all of that will be part of it.

We are working with PACOM, who has the lead, and we are in support of them, and we are in part of their planning. And it continually changes every day, depending on what assumptions you make based on what is going on.

Mr. Brown. In the last year, and with the rollout of the National Security Strategy and the National Defense Strategy, has TRANS-COM heightened its attention, its focus on the Korean Peninsula and the support to the peninsula? Or would you say it is the same today as it was 4 years ago?

General McDew. I don't like to use for my command, "heightened." So what I like to try to tell everybody is we look at the entire globe every single day. We don't shift. We don't change, necessarily. We may refine our focus a little bit on an area that is more volatile than another one, but we have to keep a broader look. If I get sucked in to only one place on the globe, and we think that we have everything we need there, then I am not able to be as flexible and agile bringing things from other parts of the globe for that effect.

We have paid more attention because we go to more PACOM exercises. We go to more planning sessions with them. But I am also thinking about the Middle East, I am thinking about South America, I am thinking about homeland defense and all of it at the same time. But we have finitely focused.

Mr. Brown. Just one final follow-up. I mean, you know, today, what is your single biggest concern or shortfall in terms of supporting a NEO operation in Korea, if you were asked to do that today? Or tonight, like we say we are ready to fight tonight. Let us go to war tonight. What is your biggest concern or shortcoming?

General McDew. How many people may be killed before we can get there. But I have a bigger concern than that. Before we start any fight, anywhere in the world, we have got to deal with the cyber contested environment and the fact that we will have to fight our way to get to the fight.

And we have not come to grips with that necessarily, as a Nation, that we don't own every domain anymore. Seventy years of going without a fight has put us in a different place as a Nation.

That is as big a concern as any, even then when you start about NEO and whether the American public is ready for the fact that we don't control everything that we once did.

Mr. Brown. Thank you, Mr. Chairman.

Mr. WILSON. And thank you, Congressman Brown.

We now proceed to Congressman Austin Scott of Georgia.

Mr. Scott. Thank you, Mr. Chairman.

I have a couple of issues I would like to hit on, first and foremost, the men and women.

Admiral Buzby, you are a graduate of the Merchant Marine Academy.

Admiral Buzby. Yes, sir.

Mr. Scott. I, as a parent, looked at the various academies. And midshipmen at Kings Point are treated very differently than the men and women at any of our other Federal service academies.

At any of the others they receive pay. Although I think that our cadets would tell you the pay is not maybe exactly what—it is not exactly \$900 by the time things are taken out of it. And they are covered under health insurance, where at Kings Point, they are not.

And I just wonder if maybe we could do more for the midshipmen at Kings Point, elevate the Merchant Marine Academy, quite honestly, to the status that I think it deserves. And any thoughts you might have on that?

Admiral Buzby. Yes, I thank you for that, sir.

And, yes, I am a very proud graduate of Kings Point. And we are a bit different. We are not DOD. We are not DHS [Department of Homeland Security]. Our students are civilians. They are not part of the military or government employees like they are at the other places. So that is why they don't get paid and why they don't fall under those other bits of coverage.

We would have to, basically, fundamentally change the way that the school is organized in order to, you know, bring them under some sort of more government umbrella to make them employees, if you will, which would be an option but, you know, there would be a big cost associated with that.

Mr. ŠCOTT. Sure. Fair enough. You are just a graduate that has a done a tremendous amount for the country and interested in your thoughts on that. And hope that maybe as we look at how we get more merchant mariners in the service, that might be an opportunity there with helping the midshipmen and others.

One of my biggest disappointments in the things that I have seen in the budget has been the proposal to retire either the *Comfort* or *Mercy*, one of our hospital ships. I was recently in Djibouti and noticed that the Chinese actually had a hospital ship in port over

there and are delivering services.

I think that soft power is extremely important. And as respectfully as I know how to, I want to criticize the decision to draw down that soft power. I would actually hope that we would be building more ships where we could deliver services to the citizens as they need it.

So what do you propose doing to account for the loss of one of, I believe, our most powerful assets, although it is soft power. How would TRANSCOM provide services in the case of mass casualties? What are you going to do in contested environments, in the case of hurricanes, where we have traditionally used one of these ships

to provide services?

General McDew. Congressman, as I try to be more thoughtful about my answers and it, sir, is a very valid question, I have to go back to the budget. If we don't pass a budget on time and give the services a reasonable expectation to know when they are going to get a budget, to be able to plan for a budget, we were going to have more tough decisions that the services will have to make.

The United States Navy, the CNO [Chief of Naval Operations] is a really good friend of mine, John Richardson. He makes the best decisions he can with the resources he is given to deal with it. That won't be the last tough decision that he will have to make if we

don't get our budget reality in order.

I am even more concerned that the decisions—we have got men and women who have served in our Armed Forces, senior leaders, who have never seen a budget passed on time in their entire careers. Or at least in their senior developmental lives. There may be Members of this body, their entire tenure, they have never seen it done on time. And I can't go back until I—I have to go back to almost being a colonel.

So those are things that are, I think, even more important questions to ask. What will we do? We will do the best we can. And I believe that a full network and all the resources we can bring to bear to

Mr. Scott. General, I appreciate your service and appreciate your comments.

We have a 2018 number. We have a 2019 number. I think that

I understand. I think your comments are justified.

But I will tell you that this is a 2020 decision. And while the Chinese are making a strategic shift to not just pay off the leader-

ship of countries, to provide services to the citizens of a country, for the U.S. to pull back on that soft power side, I think it is a strategic mistake for us.

Thank you for your service.

Mr. WILSON. And thank you so much, Congressman Scott, for your heartfelt questions.

We now proceed to Congressman Joe Courtney of Connecticut. Mr. COURTNEY. Thank you again, Mr. Chairman. And again, thank you to both witnesses.

Good to see you, General McDew, here again.

And congratulations to you, Admiral Buzby, on your confirmation as the MARAD administrator.

Admiral, this subcommittee, you know, has really actually been pretty engaged on the question of the national security multi-mission vessel, which is to, you know, recapitalize the Maritime Academy ships.

You know, we, in the last NDAA, authorized \$50 million for that program. And we will see what the appropriators finally produce in the next hopefully couple days or so. And again, there have been

prior authorizations that have sent that signal.

Obviously, the administration has come over with something much different. And I guess the question I would ask is maybe just if you could, sort of, talk a little bit about how you see, you know, that proposal which again, will deal with two academies.

There are four others that are, sort of, built in the recapitalization program for. And just whether or not you see, you know, our plan or the congressional plan as, sort of where does that fit in in terms of, again, particularly those four remaining academies?

Admiral Buzby. Right, thank you. Yes, sir. The school ships are a very high priority of ours. We fully recognized the criticality of them to the whole idea of mariner training, in particular those two old ships, the *Empire State* and the *Kennedy*, that absolutely need to be recapitalized now, which is why I think we seized upon the opportunity with the fiscal year 2019 budget request to try and take care of two of them immediately, right away, with using used ships, what we would modify to serve as training assets.

You know, we will have to see what comes out of 2018. You

know, that may advise us a different direction to go in 2019.

But absent that, you know, we have the design for the new ship and that is a great place to go. That is, I think, an aspirational goal to get to. It is a very capable ship. And it actually will help advise us on the kinds of things that we would want to have in a ship that we would procure and modify if necessary in a U.S. yard.

Mr. COURTNEY. Great. Well, thank you. I mean, as I said, this has been, you know, an issue of high interest in the committee,

again for the reasons that General McDew said.

I mean, at some point, we are talking really more about workforce than platforms in terms of this recapitalization program. And if, you know, we just, sort of, let this go, you know, it has a much bigger ripple effect in terms of the future, you know, maritime sailors that the country needs.

Admiral, we also talked the other day about a project that was started by your predecessor, Mr. Jaenichen, you know, to, sort of, finally get an updated maritime strategy for this country, which, as he repeatedly reminded us, hasn't happened since 1936.

Again, the general, you know, mentioned in his comments about the fact that maybe we do need to, sort of, go back and look at, you know, the barnacles that have built up over the years there.

But again, this is not an easy project because there are so many agencies that, you know, touch, you know, this issue. And I was just wondering, again, what your thoughts are about trying to complete that project and, you know, whether or not you see any time-

line that we can expect?

Admiral Buzby. Well, that draft strategy was waiting for me in my inbox the first day I walked in to take over as administrator. And I actually participated in contributing to it prior to becoming the Maritime Administrator. And I think Administrator Jaenichen

did a great job putting that together.

It is my goal to get that across the finish line. We are working on it in my staff right now to update it, bring it up to reality, to the realism of today. And we are getting it chopped within MARAD right now. And we will be getting out to the industry to have a look at here very shortly.

And the goal is to get it out so we can all start rallying behind

it. It is an important document.

Mr. Courtney. Absolutely. Again, as the general said, we are a maritime country, and I think it is time to get, sort of, a clear

Again, the Seapower Subcommittee, which I think at some point probably will have a role to play in terms of executing on some of that strategy, as I said, we are on standby, you know, waiting for that process to be completed.

Again, I want to thank you for, again, your commitment to finishing it.

Admiral Buzby. Yes, sir.

Mr. COURTNEY. So with that, I yield back.

Mr. WILSON. And thank you, Ranking Member Courtney. We now proceed to Congressman Trent Kelly of Mississippi.

Mr. KELLY. Thank you, Mr. Chairman.

And thank both of you flag officers, general officers, for being here today and thank you for what you do.

General McDew, I want to go back to Mr. Scott from Georgia's question, because I don't think that is an adequate answer.

United States Navy hospital ship Comfort deployed to the gulf coast of Mississippi in 2005 to respond to Katrina. In 12 days, the medical crew there provided care and medical treatment that was sorely needed by the residents in my State and the emergency workers in Mississippi and Louisiana.

Our hospital ships have served American citizens, foreign nations, in times of emergent and national disasters forever. There is a national security requirement for two ships to respond to mass casualties from a potential forcible entry operations. And the Navy is planning on retiring one of them. If the requirement is two, we have to have two or either we have to be screaming loudly.

And I don't think blaming it on the budget from the House—I have only been here 3 years, so I haven't been here as long as those guys. The House passed ours in September. We passed it again in November. And we passed it again for the defense part of that

again in January.

So we passed it three times through this House and we have got to get the Senate, but that still doesn't excuse—when I was a district attorney and I lost a statement that I needed for a murder case, I couldn't say just dismiss the murder. I still had to try that murder case and I had to find a way to win.

We have an obligation to our soldiers, sailors, airmen, and Marines, and also the civilians across this world, for you to scream loudly to the CNO or whoever that is that makes that decision to

say we have a national requirement for two.

And so I really hope that you would take that back and say we have a requirement for two, not just for wartime and forcible entry,

but also for peacetime.

And so I just really ask that you fight as hard as you can. Even though they may have thrown out your best option of evidence, please push hard to get us that second ship because there will come a time when we need that. And we need to always be ready.

And I think you are the guy who has to push that for us. We can't speak as loudly as you can, General McDew. And so I hope

you will tell me you will do that.

General McDew. I will try my best. And I would like to apologize if any of my comments seemed to be offensive about the budget. I speak loudly about the things I feel obligated to speak about in the defense to the Nation. The budget happens to be one of them.

Hospital ships, I am a big fan of hospital ships, because I love the fact that we can help injured and ill members. But I will tell you, for every one hospital ship we are short, we are going to have a requirement for 479 air refueling tankers.

Mr. Kelly. I agree. And that is my next question.

General McDew. We have a requirement. I can throw a bunch

of numbers at you.

Mr. Kelly. I am there, too. And I actually ate dinner—I actually spent some time with Secretary Mattis last night and I echoed your point about doing things on time. So I am doing my part to fuss at whoever I need to get us there, because I agree with you wholeheartedly.

But I also know that in hard times, we just got to suck it up and get there. We got to figure out a way. Because I have served 32

years and I am military.

I want to go back to C-17s and KC-135s. Mississippi has two grade wings or squadrons. I am not an Air Force guy. I am an Army guy. You know, we talk about battalions and brigades, not

wings and squadrons.

But I will tell you, those guys have been the first to deploy and the first to get there timely every time this Nation has had an incident. And our C-17—and I would invite you to come down and visit those guys. And I know that you have before, but I want you to come see them again.

But it concerns me that with the shrinking requirements, that we are shifting assets to not make those guys as ready. Let me just tell you, our pilots are as good or better than the guys on Active Duty because they get more hours because they also fly civilian.

Our maintainers are better because they are more experienced,

have been there longer, and continue to maintain.

So I just ask, when you are looking at any kind of leveling or any of those requirements, General McDew, just make sure that you understand those guys are ready and they can, do, have, will deploy on a moment's notice.

And we were strategic reserves when I was a kid, but the Guard and Reserve is no longer strategic. They are operational, and we

have to plan for them to be that.

And I know you are doing that, General McDew, so I just, kind of, want to give you a shout-out and thank you. But I also wanted

you to respond to that a little.

General McDew. I am one of the biggest fans you will ever find of the Guard and Reserve. I have flown with those units, and I have actually trained with those units. The wing commander of one your units was actually my stick partner when I went through C–17 initial qualification. I probably was the instructor for some of the guys on the 135. So I absolutely agree with you.

But here is another thing I would throw back. We are using them as an operational reserve. We are not funding them and re-

sourcing them to be an operational reserve.

I know they will come to the sound of the gun when we ask them to. But what we are asking them to do every single day is getting harder and harder, and will they stay with us in what we might call peacetime, at the pace we are using them? I believe they will, but I think I want to pay attention to how we are using them in peacetime.

Mr. Kelly. I can speak for my Mississippians. We will be there. We will stand fast. We always have. And thank you.

And I yield back, Mr. Chairman.

Mr. WILSON. And thank you, General Kelly, for your questions. We now proceed to Congresswoman Susan Davis of California.

Mrs. Davis. Thank you, Mr. Chairman.

Thank you, both of you, for being here today.

I am sorry I missed some of your earlier comments, but I wanted to get back to two issues that have been discussed by my col-

leagues, the first one dealing with the Ready Reserve Force.

And in previous testimonies, we talked about allowing a foreign-constructed ships to be inducted into the Ready Reserve Forces. This is very different than the personnel that we need to do that as well. But I didn't know what TRANSCOM's plans recently have been discussed to recapitalize the Ready Reserve Force. What is the length of time that it would take to implement this plan?

General McDew. So really, I believe the committee may have had some folks here yesterday or the last few days to talk about

the Navy's plan to recapitalize—

Mrs. DAVIS. Right.

General McDew [continuing]. That force. And right now it has got a multipronged program because we can't buy our way out of this problem overnight.

One of them is to service life extend several of the younger sets of ships as we can. The other will be to try to buy used. That avenue we have to have as a bridge to building new ships. The point we get to building new ships is, I think, 2028. So between now and 2028, I really don't want to be the largest owner of steamships in the world. You don't want me to be the largest owner of steamships in the world. So it has got to have that multipronged approach, and we need your authority.

Mrs. DAVIS. Do you see that more with retrofitting? And would

we be doing that domestically?

General McDew. So the buy used or the building ships? The building ships would be a plan to build in U.S. yards. The service life extension would be worked on in U.S. shipyards. The buy used could be a combination that we would be right now having to go out on air—I mean, American-built ships on the open market, which there are fewer of those because the decline of international trade in the U.S. market over time.

Mrs. DAVIS. And what about security concerns on foreign-constructed ships?

General McDew. The foreign-constructed ship would need to be retrofitted and brought to U.S. standards in U.S. yards.

Mrs. DAVIS. Okay. And I am sure those concerns are being attended

General McDew. And we have many of those ships that we were proposing to purchase used are sailing for us now in the MSP program.

Mrs. DAVIS. Thank you. Appreciate that.

And on the issue that we have have just been discussing, and I am delighted to hear my colleagues talking about needing to project soft power through the *Mercy* and *Comfort*. And having been on the *Mercy* when it is out in theater, I greatly understand and know how important that is.

So I think we are looking at 2020, and obviously the decision has to be made far before that. Do you see us weighing in on that and trying to look at what we might do to think about a replacement? Is that in the cards? What are you thinking about?

And the other thing, General, don't feel bad about the budget. That is exactly what you needed to say, frankly, from my point of view. Because we make a lot of decisions here and they have got be connected to these issues. And, quite frankly, they are not.

And so when we create large spending measures in the form of tax cuts and other things that we do, I mean, we need to be thinking about how that impacts this. And it is very appropriate for you to raise that issue. So I wanted to be supportive of you in doing that.

So what are the plans for replacement? And how can we be thinking about this so that perhaps we make a very strong statement about the strategic implications of not having that kind of a force available to us in the future?

General McDew. I will defer the actual plans for replacement of the *Comfort*, those hospital ships, to our Navy for that decision. That has got to be in their budget top line and they have to get through that and as part of their overall recapitalization plan for ships in the shipbuilding strategy.

My apology, by the way, was not because of what I said. It was if it was took as offensive. That was my apology. I am a Southern

boy—

Mrs. Davis. Sir, I didn't take it offensively.

[Laughter.]

Just yes. Thank you. So at this point, it is in the Navy's hands, and if we have an interest in weighing in on that, I think what would be helpful, and again, this is, you know, I am sure the Navy is listening, that it is important to know what is that worth to us? I mean, what is it worth it, you know, to—

General McDew. Well, I would offer that question on a number of things across our country. And in particular, I love the fact that you have us here today shining a light on some areas that don't

get a light shined on them.

Everybody likes to talk about our kinetic force, and we can build the greatest assets in the world, but there are a lot of things that are foundational to the Department of Defense and national security that go without this kind of attention.

Mrs. Davis. Yes.

General McDew. And I go back to our commercial industry. I will go back to all those assets that are out there that make us the Nation that we are.

Mrs. DAVIS. Thank you.

Mr. WILSON. And thank you, Congresswoman Davis.

We now conclude with the best, Congressman Bradley Byrne of Alabama.

Mr. BYRNE. Thank you, Mr. Chairman.

Admiral Buzby, my Uncle Jack Langsdale graduated from the Merchant Marine Academy and served in World War II.

Admiral Buzby. Great. God bless him.

Mr. Byrne. I came across a letter that he wrote to my grand-mother Christmas Eve 1942, telling her that he is fine, "But if you don't hear from me, that is good news." The next thing she heard he was lost at sea with all hands on his ship. And we lost thousands of merchant mariners, you know, during World War II.

And I was thinking about that when I was looking at your written testimony because I heard you say we have got 1,800 gap on merchant mariners. But your written statement says, "The estimate assumed that all qualified mariners would voluntarily report when called upon." I think that probably would happen. "And that there will be no ship losses or personnel casualties."

Admiral Buzby. Right.

Mr. Byrne. We know that is not likely to be the case.

Admiral Buzby. That is correct.

Mr. Byrne. So your 1,800 number dramatically underestimates what our need is.

You heard Mr. Courtney's on the Education and Workforce Committee, Chairman Wilson's on the Education and Workforce Committee, Ms. Stefanik's on the Workforce Committee. I am too. What can we do to help?

Admiral Buzby. Well, the biggest thing, probably, you know, it is going to be a matter of—that is a good question.

[Laughter.]

Mr. Byrne. That is why I asked it.

Admiral Buzby. There are a lot of ways to come at it.

You know, the 1,800 people short, the way we have place for people to work today is more ships. And for more ships to be around there has to be more cargo. It all kind of hangs together.

Mr. Byrne. Right.

Admiral BUZBY. So it needs to start with that and then work up toward with more cargo to carry, more opportunity, more ships then, therefore, to be around to carry it, requiring a larger pool of mariners there to man those ships. So that is really what it comes down to.

Mr. Byrne. Yes. And then, sometimes we get lost at that here in Congress. We think that what is going on here is we are trying to prop up some private sector industry for its own sake. That private sector industry is critical to the national security issues regarding the United States—

Admiral Buzby. Absolutely.

Mr. Byrne [continuing]. Of America.

Admiral Buzby. That is what we depend upon.

Mr. Byrne. And so we want to help you. You can help us by helping us put that case together. And you can state it better than we can. It is better for us to refer to you and what you have determined and what you think is important for the security of the country. And I would ask you to help us help you by giving that to us and give us a plan.

What do you want us to do? Here in the Armed Services Committee, Education and Workforce Committee, what do we need to do so that we make sure that we have those personnel in place?

Because there is a conflict out there in the future and we are hearing in other hearings that our adversaries are developing very capable submarine fleets, just like the Germans did before World War II.

And we have got to be very dry-eyed about this and understand what is out in front of us and what we have got to be prepared for because if we wait until the conflict happens—you know this better than I do—it is too late.

Admiral Buzby. Right.

Mr. Byrne. We have got to do it now. So I would just ask you to help us help you by giving that to us. Lay out the game plan for us.

I told this to Secretary Spencer not too long ago. I am like the offensive guard on the football team. Coach call in the play. But you got to give us that play so we can know what we need to do to carry it out. And I just ask you to spend some time thinking about that and let us know.

Admiral Buzby. Right. And we will be happy to provide that.

Mr. Byrne. And with that, Mr. Chairman, I yield back.

Mr. WILSON. And thank you, Congressman Byrne, for your extraordinary family heritage.

[Laughter.]

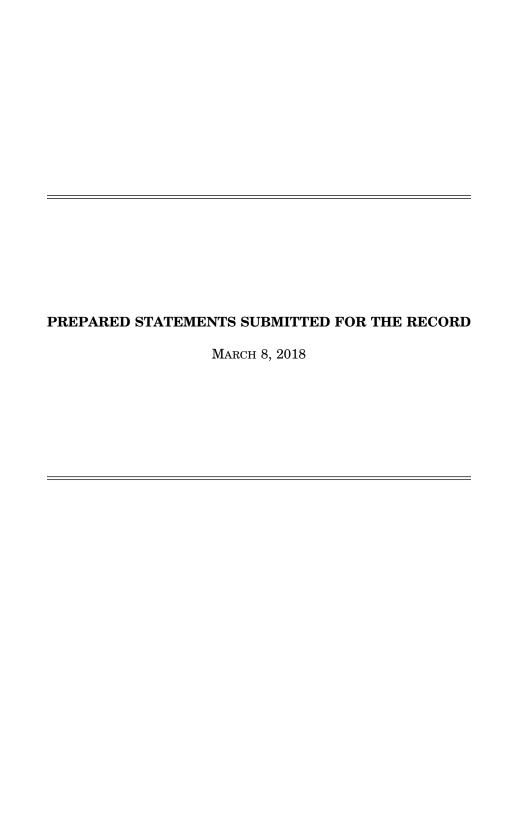
We thank the witnesses. We appreciate your service to the Nation.

And Tom Hawley has been excellent again keeping us on track. We are adjourned.

[Whereupon, at 10:23 a.m., the subcommittees were adjourned.]

APPENDIX

March 8, 2018



Statement of the Honorable Joe Wilson Chairman, Readiness Subcommittee "Mobility and Transportation Command Posture" March 8, 2018

Good morning. The subcommittees will come to order. I welcome each of you to this joint hearing of the Readiness Subcommittee and the Seapower and Projection Forces Subcommittee on the posture of the US Transportation Command.

Today the subcommittee will hear from the Commander of Transportation Command and the Administrator of the Maritime Administration on how well the Department of Defense is postured to meet the heavy and sustained logistical demands of a major conflict.

While TRANSCOM has operational control of some Air Force and Navy owned aircraft and ships for this mission, a major contingency will require the substantial assistance of the US commercial air and shipping fleet. Further, TRANSCOM must rely on the military departments to budget for critical organic assets such as ships, planes, and ports, and the commercial air and shipping industry to willingly participate in defense logistical programs.

TRANSCOM can influence, but cannot direct, Army, Navy, and Air Force budget decisions, nor commercial industry business decisions.

We understand that there are some deficiencies in this complex system that must be addressed. Among these are the Air Force's aging tanker fleet and some near obsolete vessels that are part of our surge sealift fleet. We welcome the witnesses' perspective on these issues and any recommendations they may have.

Before I introduce the witnesses, I turn to the distinguished Ranking Member of the Readiness Subcommittee, the gentlelady from Guam, Madeleine Bordallo, for her opening comments.

Opening Remarks of the Honorable Robert J. Wittman for the

Joint Readiness and Seapower and Projection Forces Hearing on Mobility and Transportation Command Posture

March 8, 2018

I want to welcome General McDew and Admiral Buzby and thank them for the time and effort they have made on this most important issue. I also want to thank Chairman Wilson for offering to have this joint subcommittee hearing today. I believe that there are a number of overlapping issues with the Readiness Subcommittee and I look forward to working with the gentleman from South Carolina to move these issues through the NDAA markup process.

I think the Department of Defense needs to reassess its commitment to a core military competency: logistics. At the heart of any successful campaign is a logistics train that provides the bullets and butter to the combatant forces in a timely manner. While high-profile acquisition programs are prioritized, little-known capabilities are left to continue their operations with little funding. It is obvious to me that we need to turn our attention to airlift and sealift elements of our military strategy and take immediate steps to improve our logistics capabilities.

Today, we have a surge sealift force that averages 42 years old. Certain officials have referred to this sealift force as the last bastion of steam powered technology in the world. In fact, by 2020, TRANSCOM will own almost all of the steam plant ships in the world. This is not a moniker that I relish but it is a good example of the plight of our sealift forces. While MARAD has done a good job of maintaining and activating select ready reserve force ships, the reality of a full activation of this aged fleet is at best circumspect.

I am equally perplexed that the military has not, to date, presumed attrition in their auxiliary forces requirements. It is pretty obvious that we have overly optimized our forces for peace. As envisioned by the National Defense Strategy, it is time that we shift our focus to getting ready for a future of potential conflict. I look forward to General McDew's assessment as to the impacts of the National Defense Strategy on the mobility forces. After meeting with General McDew last week, it is also my understanding that an updated report on auxiliary forces, to include attrition, will be complete this fall.

As to our strategic airlift capabilities, today we depend on a much smaller fleet to move cargo, personnel, to MEDEVAC the wounded, and to support disaster relief around the globe. For example, of the response to Hurricanes Maria and Irma last October left an insufficient strategic airlift capability available to move troops and cargo to Afghanistan in a timely manner—threatening the ability of the Department of Defense's ability to blunt Taliban territorial gains.

I am concerned that outdated planning assumptions need to be reviewed; I believe that assumptions made for the on-going Mobility Capability and Requirements must take into account the logistical needs of a future dispersed

battlefield. Furthermore, the administration has made it clear that it wants to increase Army and Marine Corps force structure that will drive even greater mobility requirements. Additionally, areas are becoming less permissive for civilian aviation operations to deliver these additional Soldiers and Marines to their areas of operation increasing the demands on an already insufficient fleet of strategic lift aircraft. Consequently, I believe it is critical for TRANSCOM to thoughtfully consider how best to increase strategic airlift capacity and its ability to operate in contested environments around the globe.

At the conclusion of World War II, Fleet Admiral Ernest King reflected on our success and our shortcomings. He indicated "The war has been variously termed a war of production and a war of machines. Whatever else it is, so far as the United States is concerned, it is a war of logistics." It is time that we reflect on Admiral King's assessment... an assessment that was paid with the blood and sweat of the greatest generation. Today, we need to ensure that our logistics capability will provide the lift required and in a timely manner to support our military objectives.

I thank Chairman Wilson for working with the Seapower and Projection Forces Subcommittee on this important issue and I yield back the balance of time.

Statement of General Darren W. McDew, United States Air Force Commander, United States Transportation Command



Before the House Armed Services Committee Readiness Subcommittee and the Seapower and Projection Forces Subcommittee On the State of the Command 8 March 2018

UNITED STATES TRANSPORTATION COMMAND 2018

America as a Superpower

The United States of America is the world's only superpower. The Nation maintains this status because of our global influence and ability to project power around the world at a moment's notice. United States Transportation Command (USTRANSCOM) is a critical element in this national capability. The men and women who make up this command provide an unparalleled expeditionary capability and underwrite the Nation's ability to rapidly respond to emerging crises. A global, warfighting combatant command (CCMD) with functional responsibilities, USTRANSCOM's role in projecting and sustaining power is the cornerstone of the Joint Force's efforts to meet national policy objectives.

Established in 1987, United States Transportation Command's marked its 30th Anniversary in 2017. Operationalized during Operations Desert Shield and Desert Storm, the command now delivers global mobility solutions every day in both peace and war through its component commands: Military Surface Deployment and Distribution Command (SDDC), Military Sealift Command (MSC), Air Mobility Command (AMC) and what I call our fourth component, the commercial industry. Together, with our subordinate commands, Joint Transportation Reserve Unit (JTRU) and the Joint Enabling Capabilities Command (JECC), our Total Force team of Active Duty, Guard, Reserve, civilians and contractors, remains postured to preserve the Nation's comparative advantage and provide the President a broad range of options today, and tomorrow.

In the past year, USTRANSCOM bolstered American influence around the globe. We exercised our deployment capabilities, sustained combat operations, and managed the expansive Joint Deployment and Distribution Enterprise (JDDE). USTRANSCOM's team of Joint

Warriors also enabled the movement of America's sick and wounded to medical treatment facilities worldwide, relocated thousands of families, and responded to every Geographic Combatant Command's requirements without fail. We performed 33 Brigade Combat Team (BCT)-sized movements, shortening deployment timelines and demonstrating our ability to deliver a decisive force at the time and location of our choosing. When hurricanes ravaged Texas, Florida, Puerto Rico, and the U.S. Virgin Islands, our joint enabling and strategic mobility assets deployed to provide critical capabilities including planning support, aeromedical evacuation, and life-saving supplies. Our efforts demonstrated the Nation's resolve and strengthened partnerships worldwide.

Mission

The President of the United States designated USTRANSCOM's five primary roles and responsibilities through the 2017 Unified Command Plan (UCP). The UCP established USTRANSCOM as the Joint Deployment and Distribution Coordinator (JDDC), merging and expanding our previous roles as Distribution Process Owner and Global Distribution Synchronizer. This evolution of our responsibilities provides extended authorities to coordinate operations and planning across all domains spanning the JDDE. As DoD's Single Manager for Transportation, USTRANSCOM provides common user and commercial air, land, and sea transportation, as well as terminal management and air refueling in support of deployment, employment, sustainment, and re-deployment. We are responsible for providing joint sourcing solutions for all mobility forces and capabilities, in close coordination with the other CCMDs in our role as the Mobility Joint Force Provider. Enabling America's unprecedented patient movement capability, we arrange timely and safe movement for the Nation's ill and injured in

support of the CCMDs, other US government agencies, and key international allies and partners as the **DoD Single Manager for Patient Movement**.

Our fifth and final UCP responsibility is the provision of **Joint Enabling Capabilities**, performed by the JECC. The JECC provides alert postured communications, planning, and public affairs capabilities to accelerate the formation of Joint Force headquarters. Delivering high-impact experts with knowledge in joint warfighting functions, the JECC supports SECDEF-directed deployments as well as immediate Global Response Force (GRF) missions. This Total Force team offers a unique capability not replicated by any other organization within DoD.

The Contemporary Security Environment

USTRANSCOM has been successful for 30 years, but the Nation is at an inflection point, and we must evolve to remain viable in the future. Volatile geopolitics, shifting demographics, and emerging technologies are changing the character of war. These considerations are changing societies and the way we fight – they are also changing why and where wars are fought, and who is fighting them. Today, every domain is contested, with conflict unconstrained by Geographic Combatant Command boundaries or principles of sovereignty. Lower barriers of entry are expanding our adversaries' access to disruptive technology, placing our technological superiority at risk. Mobility forces may be required to transport and sustain US and allied forces while under persistent multi-domain attack, including deception and data manipulation in cyberspace. We face the most complex and volatile security environment in recent history. Our past successes will not ensure success tomorrow.

The Joint Force has taken domain dominance for granted for 70 years, but we can no longer assume logistics will arrive in theater unchallenged by our adversaries. In an effort to better understand contemporary threats and operate effectively in the current context,

USTRANSCOM hosted a series of Contested Environment Wargames and Summits. Lessons learned from these events drove changes in how we plan for attrition, cyber, mobilization, authorities, access, and command and control. We now consider the attrition of organic sealift and airlift fleets in our planning and requirements analysis, as well as the need for global mission command of disparate mobility forces. A growing realization that the homeland is no longer a sanctuary led us to plan for denied access to our own strategic nodes, as well as those abroad. Our analysis revealed that an adversary can derive immense strategic benefit from cyber operations alone. The reality of our time is that adversaries no longer have to stop us with bombs or bullets; all they have to do is slow us down with ones and zeroes. Yet our preparation for these challenges cannot exist solely on paper. We must make some tough fiscal decisions today, prioritizing readiness and modernization to assure our strategic advantage tomorrow.

Our Global Perspective

In a contemporary environment filled with uncertainty and rising geopolitical tensions, the logistics enterprise must always be ready. Key to this preparedness is USTRANSCOM's effort to set the globe for logistics on behalf of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, continuously shaping the Nation's ability to respond to simultaneous threats within a trans-regional, multi-domain, and multi-functional security environment. With our global perspective and responsibilities, this command is uniquely postured to balance resources worldwide and understand the risks associated with surging and swinging mobility assets between theaters.

Setting the globe for logistics involves balancing resources historically employed in a theater-centric paradigm and regularly using the worldwide network of modes, nodes, and routes to ensure the network remains active and resilient. Balancing and using the globe builds

resilience within the JDDE, maximizes scarce strategic transportation assets, and strengthens relationships with our fourth component, allies, and strategic partners. Balance requires having the proper authorities to position and reposition mobility assets, thus enhancing agility, mitigating risk across the JDDE, and increasing the President's decision space. Effectively using the globe means unshackling ourselves from our habituated uses of the JDDE. The previous practice of only using finite strategic nodes for deployment and sustainment operations limits the Joint Force's flexibility to compete over the long term and deter conflict in multiple regions, while preparing to win in any war. We must implement new and innovative ways of using the globe by fostering strong partnerships and agreements with commercial industry, allies, and other partners to build network resiliency, expand our competitive space, and proliferate our power projection capabilities. When USTRANSCOM sets the globe, it creates options... and options create opportunities.

Challenges and Opportunities

The Secretary of Defense has deemed his number one priority, "Restoring Readiness as We Build a More Lethal Force." As we restore readiness and increase lethality, the resources necessary to transport and sustain the Joint Force must keep pace. Current operations and ongoing sustainment requirements engage a significant portion of the total force, limiting capacity to surge or meet increased deployment and distribution demands. The DoD has historically viewed the Reserve Component as a strategic reserve. However, capacity shortfalls in the Active Component required the DoD to leverage Guard and Reserve assets to maintain steady-state activities for nearly three decades. Several conditions exacerbate this concern; fiscal uncertainty, aging fleets, workforce shortages, and an increasingly contested maritime domain. Despite the many challenges of our time, global integration, emerging technologies, and the collective

experience of our mobility forces present opportunities to strengthen our distribution networks and improve the effectiveness of our logistics operations while decreasing risk to force. Whether to pursue opportunities or overcome challenges, we must continue to invest in key areas to secure victory on tomorrow's battlefields. These areas fall into the following four broad categories, which mirror USTRANSCOM's priorities: Readiness, Cyber, Evolving for Tomorrow, and Workforce Development.

Readiness: State of the Command

USTRANSCOM stands ready to deliver in support of national objectives today.

However, as we look to the future, contested domains and fiscal uncertainty present a threat to the viability of the JDDE. If we fail to address a number of these challenges in the coming years, the strength on which the Nation has historically relied will no longer be there when needed. Specifically, we must address issues of capacity, availability, and proficiency within USTRANSCOM's air, land, and sea components; shore up commercial industry's capacity and security gaps; and provide the necessary resources to rebuild readiness and modernize the mobility force.

Fiscal Uncertainty

The Budget Control Act (BCA) and recent Continuing Resolutions prevent the force from adequately addressing our most pressing readiness concerns. These legislative measures force the Services to prioritize immediate operational needs over prudent long-term planning and investment, eroding readiness over the long term. Specifically, the BCA prevents the Services from adequately manning, training, and equipping their forces for contemporary challenges, ultimately threatening USTRANSCOM's ability to deploy forces when necessary. After more than 16 years of conflict, rebuilding readiness and modernizing the force is a national imperative.

However, timely and predictable funding is essential if we are to make progress toward meeting tomorrow's demands; the uncertainty that comes with government shutdowns and continuing resolutions only delays these efforts.

Sealift

When the United States goes to war, USTRANSCOM moves 90% of its cargo requirements with the strategic sealift fleet, which consists of government-owned ships augmented by the commercial U.S.-flagged fleet. The ability to deploy a decisive force is foundational to the National Defense Strategy, as the size and lethality of the force is of little consequence if we are unable to project power in the pursuit of national objectives. Therefore, the readiness of the entire strategic sealift portfolio, both organic and commercial, remains the top priority for USTRANSCOM.

USTRANSCOM's Navy component, Military Sealift Command (MSC), controls the organic strategic sealift ships that deliver logistics and humanitarian relief, move military equipment, supply combat forces, and forward position combat cargo around the world. MSC also assumes operational command of the Maritime Administration's (MARAD) Ready Reserve Force (RRF) ships during periods of activation. However, our organic sealift capabilities will degrade rapidly over the coming years if we fail to pursue a responsible recapitalization strategy. Although the Navy added service-life extension funding for 22 vessels in POM19, 30 of 65 Roll-on/Roll-off (RO/RO) vessels and all 11 special capability vessels could age out over the next 15 years. As further directed by the FY18 National Defense Authorization Act (NDAA), USTRANSCOM is working with the Navy on a comprehensive recapitalization plan which includes acquiring used vessels, extending the service life of able vessels, and building new ships – all three of which are required to stabilize the fleet.

The 2018 NDAA authorizes the Secretary of Defense to purchase two used vessels. This provision was intended to serve as a bridging strategy within the recapitalization program but is insufficient to bridge the impending capacity gap. Based on the estimated build rate and size of newly constructed vessels, 24 additional "buy-used" authorizations are needed by 2030. Available capacity for used vessel acquisition presents a prime opportunity to pursue this strategy.

As a result of changes in market conditions within the maritime industry,

USTRANSCOM will be the only remaining owner of steam ships in the United States by 2020.

We possess a sufficient number of certified steam engineers to operate this legacy vessel today.

However, the pool of certified steam engineers will rapidly drop in number and proficiency as steam-powered commercial vessels leave service. Due to this diminishing capability, recapitalization of steamships with newer technology, such as diesel ships, is a high USTRANSCOM priority.

Opportunities to regularly exercise the organic Strategic Sealift Fleet ensures MSC maintains the highest state of readiness. Activating ships for exercises and sea trials is the primary mechanism for assessing RRF and MSC Surge Fleet readiness. These operations allow MSC and MARAD to better assess changes in material degradations, vessel and Mariner availability, and corresponding risk to mission accomplishment. However, in a fleet of 61 vessels, current resourcing only allows for 10 training activations per year. We regularly pursue additional opportunities to integrate our organic fleet into DoD-supported exercises and support unit-level missions, including participating in exercises with other CCMDs. We will continue to pursue means to increase activations and extend sea trials, where possible, to get these ships underway with more frequency and improve the overall readiness of the fleet.

An aging organic sealift fleet coupled with a reduction in U.S.-flagged vessels threatens our ability to meet national security requirements. The U.S.-flagged fleet has been in steady decline since World War II as a result of decreasing demand and the rising cost of the U.S.-flagged fleet compared to international fleets. In 1951, 1,288 U.S.-flagged ships were registered in the United States. In 1990, the fleet was down to 408 ships, and in 2013 just 106. Today, 82 U.S.-flagged ships operate in international trade, representing a 25% reduction in just the last 5 years. This reduction in actively trading U.S.-flagged vessels correlates to a decline in the numbers of qualified Merchant Mariners, the workforce required to deliver U.S. Forces to war. If the fleet continues to lose ships, a lengthy, mass deployment on the scale of Desert Shield/Desert Storm could eventually require U.S. Forces to rely on foreign-flagged ships for sustainment.

The U.S.-flagged commercial fleet is vital to the Joint Force's ability to accomplish its mission. USTRANSCOM's relationships with U.S.-flagged sealift partners are formalized through the Voluntary Intermodal Sealift Agreement (VISA) and the Maritime Security Program (MSP). Since their establishment in 1996, participation in these programs by privately-owned U.S.-flagged commercial shipping has proven a cost-effective means to assure access to sealift capability, capacity, and worldwide networks. The Merchant Marine Act of 1920, or the Jones Act, and the Cargo Preference Act are intended to ensure a baseline of ongoing business to support our inter-coastal shipping capacity and maintain a market for U.S. industrial shippard infrastructure to build, repair, and overhaul U.S. vessels. However, the dwindling size of the domestic U.S. inter-coastal shipping fleet demands that we reassess our approach to ensure that the U.S. retains critical national security surge sealift capabilities. We also may need to rethink policies of the past in order to face an increasingly competitive future.

The MSP provides an intermodal and logistics capability outside of the DoD portfolio that would be cost prohibitive to replicate. MSP assures access to 60 militarily useful vessels, the mariners who crew those ships, and commercial carriers' global networks and infrastructure. Without this program, DoD's asymmetric advantage in logistics would be put at significant risk as many of the vessels currently in the program would reflag under foreign flags and no longer participate in VISA. In this scenario, DoD would be forced to augment organic capacity with foreign-flagged vessels to deploy and sustain the Joint Force. During Operation Desert Shield, 13 of 192 (7%) foreign-flagged vessels declined to enter the area of operations, while U.S.-flagged vessels provided steadfast support. Although the security environment today is more complex than it was 27 years ago, MSP remains a critical enabler in our ability to execute the National Defense Strategy (NDS), and it must continue to evolve. We are reviewing MSP this year to ensure the program's next evolution is best suited to support national defense.

Along with declining capacity, we are also concerned about the pool of current and qualified licensed Merchant Mariners who crew America's ships. If the international U.S.-flagged fleet continues to decline, the Merchant Mariner labor pool will also decline, putting at risk our ability to surge forces overseas and sustain a protracted conflict with U.S. Mariners.

Although the qualified Mariner labor pool industry-wide is adequate to support a surge requirement today, a protracted need for Mariners would stress the labor pool beyond acceptable risk. The DoT, with DoD support, must seek innovative ways to recruit and retain sufficient Mariners to sustain sealift operations across the full spectrum of conflict. A healthy and viable U.S.-Flagged Fleet remains the foundation for a suitable Merchant Mariner pool.

Airlift/Air Refueling

USTRANSCOM's air mobility forces provide the Joint Force with a distinct advantage, projecting and sustaining immediate power in response to crises and contingencies around the world, any time the Nation calls. USTRANSCOM's Air Component, Air Mobility Command (AMC), provides airlift, air refueling, aeromedical evacuation, and air mobility support functions in support of all CCMDs by leveraging a team of Total Force Airmen and commercial partners. Although the air mobility enterprise stands ready to deliver an immediate force tonight, we must address several readiness concerns in our airlift and air refueling capabilities, as well as our patient movement system, to ensure we are able to meet our defense objectives in the future.

America's air refueling fleet is the most stressed of our air mobility forces. The combination of an aging fleet, increasing demand, and global tanker distribution puts a significant strain on this scarce national resource. At an average age of 61 years old, the KC-135 remains the workhorse, comprising 87% of the tanker force. Investments are necessary to allow the aircraft to continue to operate in a changing environment and stem the decline in aircraft availability. Nonetheless, as the fleet ages, sustainment costs and dwindling availability rates will eventually become untenable. The KC-10, which served as a key part of the tanker force for decades, is programmed for retirement in FY 19-24. The current tanker requirement, set at 479, was based on the 2013 Mobility Requirements and Capabilities Study (MRCS). The 2018 NDAA-directed Mobility Requirements and Capabilities Study (MCRS-18) will reflect requirements articulated in the new National Defense Strategy and address the current and future levels of risk to the air refueling mission, which may drive the Department toward increasing air refueling capacity for CCMDs. However, we already know the convergence of an aging air refueling fleet with protracted KC-46 production puts the Joint Force's ability to effectively

execute war plans at risk. Day-to-day, high levels of air refueling fleet utilization are approaching a point that challenges the Total Force to sustain current levels of support. Thus, the tanker fleet's end strength will require careful synchronization between KC-10 and KC-135 retirements and KC-46 production and delivery to sustain current force projection capabilities.

The uneven geographic allocation of the tanker fleet requires an agile command and control construct to balance this high-demand asset across GCCs. The practice of stockpiling resources in specific regions with no single organization possessing the capacity and authority to dynamically reallocate assets creates deficiencies in some theaters and surpluses in others. Global sourcing solutions, on the other hand, generate capacity out of multiple regions to support emerging crises in prioritized theaters.

To that end, the SECDEF directed USTRANSCOM, through the 2017 Global Force Management Allocation Plan (GFMAP), to manage in-theater air refueling assets that exceed the minimum required by Geographic Combatant Command (GCC) war plans. However, legislation enacted in 2011 reserves a disproportionate number of theater-assigned tankers for USPACOM and USEUCOM, limiting USTRANSCOM's ability to balance scarce resources against total requirements. Optimal allocation of assets requires a trans-regional perspective and the flexibility to manage mobility forces at an enterprise level. Given its global visibility, command and control resources, and geographic impartiality, USTRANSCOM is uniquely suited to manage the entirety of the tanker fleet. Relief from legislation that restricts changes to operational control of tanker forces in USPACOM and USEUCOM would allow USTRANSCOM to optimize the air refueling fleet and mitigate risk across the Joint Force.

The Operational Support Airlift (OSA) - Executive Airlift (EA) enterprise provides vital transportation for senior DoD and Federal officials, including the President, Vice President,

Secretary of Defense and Presidential Cabinet. The EA fleet remains a necessary asset, providing our senior military and government leaders with in-flight command, control, and communication capabilities as well as dedicated, secure transportation. Given its high-visibility and national level impacts, USTRANSCOM and the Joint Staff are reviewing options for long-term management and oversight of the EA enterprise.

The Air Force has made key investments in upgrading, modifying, and recapitalizing its airlift fleet, and we must stay the course. The last of 52 C-5M aircraft is scheduled for delivery in 2018 through the Reliability Enhancement and Re-Engineering Program (RERP). Similarly, advances in the C-17 fleet are enhancing its viability through the development of high altitude airdrop capabilities and improved secure communications for portions of the fleet. The Air Force also modernized the tactical airlift fleet through acquisition of new C-130J aircraft and various upgrades to the Air Force Reserve Command and Air National Guard C-130H fleets. The health of the airlift fleet remains strong and continues to improve through these timely upgrade and modification efforts.

However, the growing pilot shortage challenges our ability to sustain current force projection levels. Roughly 30% of the Air Force's pilot shortages come from air mobility platforms. By FY19, we project mobility manning shortfalls will reach or exceed about 650 pilots. A nearly insatiable demand for commercial pilots, coupled with a high OPTEMPO, is leading to a larger-than-expected number of pilots leaving the service. Last year, the Air Force took actions to mitigate the loss of experienced pilots and increase production of new pilots. We expect to see initial results from these efforts by FY20.

Today, the mix of Active to Reserve Component resources in USTRANSCOM means the command relies on the Reserves and National Guard to fulfill war-time requirements. For

example, more than 50% of AMC's airlift and air refueling assets are in the Reserve Component. The current force balance creates component command dependence on National Guard and Reserve units to volunteer for activation. Furthermore, for the past three decades, the Reserve Component has been used as a reliable and trustworthy asset to sustain day-to-day operational requirements, a function for which, historically, they were not resourced or structured. Funding increases in FY18 and FY 19 will alleviate some of the strain on the force but the disproportionate force mix may still have broader implications across the department. The Department's vigilance is required to ensure the means support the ends against which the Services have aligned our Reserve Component.

Our Civil Reserve Air Fleet (CRAF) partners are critical to the success of our enterprise, and today, the CRAF program is healthy and fully subscribed to meet national security objectives. CRAF is a voluntary program by which U.S. air carriers are awarded government airlift business to assure access to commercial capacity during contingencies and emergencies. This resolute relationship has historically afforded our partners the opportunity to lift about 93% of all DoD passengers and 40% of DoD air cargo in direct support of our warfighters. As our 25 CRAF carriers remain in a steady state of readiness to support DoD cargo and passenger requirements, we are committed to maintaining a viable CRAF program to continue to meet national defense requirements.

Surface

When the Nation goes to war, American forces begin deployment operations using U.S. transportation infrastructure. USTRANSCOM relies on the DoT, along with other Federal and State agencies to ensure our roads, rails, and ports are capable of supporting the warfighter's deployment and distribution requirements. Our Army component command, SDDC, represents

the interests of the DoD to access and safely use both private and public transportation infrastructure and services. Today, these networks are capable of effectively deploying the Joint Force. However, it is imperative that we remember that our transportation infrastructure is not merely a medium for commercial and civilian use, it is a national strategic asset, critical to moving military members, equipment, and supplies in times of crisis.

Highways and railways are strategic links that serve as routes for the DoD to deploy military forces from fort to port and to project warfighting material from factories to foxholes. Currently, public road networks are capable of meeting DoD ground transportation needs while providing adequate access to commercial trucking capacity to meet current and anticipated surface transportation requirements. America's rail networks rapidly move large quantities of heavy equipment from military installations to ports of embarkation, a capability that is critical to national security. SDDC collaborates closely with the DoT and the railroads to assess the suitability of our rail networks (most of which are privately owned) to continue to support military needs. Although rail networks remain adequate, we face age-mandated retirements of some of our uniquely capable, DoD-owned railcars. We are developing a plan, in close cooperation with the Department of the Army, to replace this critical deployment enabler.

The health of America's strategic sea ports are also of vital national interest. There are 23 designated Strategic Seaports along our coasts – 17 commercial and 6 military – which serve as major springboards from which the Nation delivers diplomatic and military solutions around the world. The infrastructure of each of these ports, to include their cyber-enabled infrastructure, must be viable and resilient to allow the flow of equipment and cargo during times of conflict or distress.

Military Ocean Terminal Concord (MOTCO) on the West Coast and Military Ocean Terminal Sunny Point (MOTSU) on the East Coast are critical to DoD's ammunition distribution mission, and remain a top readiness priority. MOTCO, in particular, was identified as requiring increased investment due to aging infrastructure and lack of acceptable, ready alternatives to support ammo movement to the Pacific. The U.S. Army is in the process of a \$300 million modernization program at MOTCO, to include construction of a new pier. We must continue to maintain and modernize both of these strategic seaports, as well as build capacity at other ports to enhance resilience, as their unique mission set underwrites the Joint Force's lethality. *Patient Movement*

Today, USTRANSCOM operates the most robust patient movement system in the world, safely and efficiently moving America's ill and injured. Last summer, we completed our Aeromedical Evacuation Requirements Analysis to evaluate the number of aeromedical evacuation crews, Critical Care Air Transport teams, and patient movement equipment items required to move patients on time in a single scenario. Although we conduct patient movement without falter in the current operating environment, we found shortfalls in our ability to surge for large-scale conflict with mass casualties. We are currently working with the Air Force to determine the appropriate way ahead to mitigate these shortfalls.

Limitations on patient movement in a non-permissive context highlighted the need to develop interoperable, multi-modal solutions for joint casualty transportation. Current plans create a near dependence on airlift which may not be feasible to meet requirements depending on the scenario. Furthermore, as military medical facilities consolidate or close, the military infrastructure to support patient movement is increasingly strained. Insufficient access to en route medical care (transfer, staging, and treatment) at critical distribution nodes will further

challenge our ability to safely move expected numbers and types of casualties in future conflicts.

Additionally, a decrease in CONUS-based health care capacity in the National Disaster Medical System (NDMS) partnership will further complicate our ability to move patients to the care they need.

The combination of insufficient patient movement personnel, equipment, infrastructure, and capacity significantly decreases the likelihood that our Joint Warriors with survivable injuries and illnesses will have the same high survival rates we have seen in recent conflicts. In partnership with the Joint Staff, we initiated a capabilities based assessment which will be completed this year. We are also working with the Services, the Joint Staff, and the National Health Enterprise to address these challenges.

Cyber

Threats in the cyber domain pose the greatest threat to our decisive logistics advantage. The return of great-power competition is characterized by activities in the so-called "gray zone." In this new normal, both state and non-state actors conduct persistent probes and malicious cyber activities, seeking to erode the U.S. military advantage and alter existing international order. The logistics enterprise is more susceptible to these malicious activities than other military organizations based on our unique relationship with commercial partners. Although logistical and operational planning generally takes place on classified networks, ninety percent of military logistics and global movement operations executed on unclassified commercial networks. This challenge is exacerbated by the inadequacy of implementing existing cybersecurity standards and the fact that DoD's extensive cyber protections do not extend to industry, critical vulnerabilities in our cyber security posture. Defending DoD information on those commercial networks goes beyond the authority of a single combatant commander. Mission assurance, particularly in

degraded and contested environments, requires a collaborative effort between the Department of Homeland Security, other national agencies, commercial industry, and the Nation's leading experts. We will not solve this problem alone.

In 2017, USTRANSCOM made strides toward hardening our overall cybersecurity posture in collaboration with commercial industry. We strengthened our partnerships through the National Defense Transportation Association (NDTA) with the inclusion of cybersecurity training programs for the entire enterprise. Moreover, several industry CEOs participated in our Cyber Roundtables, creating future options to improve national defense, incorporate commercial equities in the initial stages of contingency planning, and share information across domains. Learning from these venues, we began modifying existing Transportation Service Provider contracts to mandate compliance with the National Institute of Standards and Technology's (NIST) Special Publication 800-171, which governs the protection of covered defense information, including unclassified controlled technical information. Prior to this update, transportation contractors were not required to upgrade security systems or comply with threat reporting measures. We are beginning to implement contractual language, which requires our industry partners to adhere to NIST standards commensurate with Defense Federal Acquisition Regulation System (DFARS) rules. This measure will protect information systems handling of comprehensive DoD transactional information. We are also embedding a contractual requirement for participants to perform self-assessments against NIST standards and submit a plan of action to USTRANSCOM to address deviations from the standard and non-compliance. USTRANSCOM may conduct an on-site visit or request a third-party assessment to review progress toward meeting action plans.

The completion of an initial Mission Assurance Assessment of the Joint Deployment Distribution Enterprise (JDDE) also offered insight on where we need to improve our cyber defenses. With the knowledge gained from this study, we are completing a more comprehensive, OSD-directed assessment of selected strategic seaports. We incorporated cyber events in multiple major exercises and learned it is impractical to defend everywhere, all the time. Instead, resiliency is key, not only in our cyber-enabled systems, but also in the operations that depend on those cyber-enabled systems. As demonstrated by Maersk's June 2017 NotPetya incident, one cyber incident has the potential to impact the entire enterprise.

To address these challenges, we must iteratively improve risk-reduction measures to include identifying and hardening security risks for National Key Cyber Terrain, developing and implementing cybersecurity standards, sharing information across agencies, conducting routine vulnerability assessments, mitigating insider threats, and developing contingency plans for significant cyber incidents. We need to link DoD and DHS cyber authorities across critical defense networks and develop procedures to share information with our fourth component as we all operate among the same threats. Finally, cybersecurity standards must advance beyond the minimum requirements and facilitate a collective framework to defend against competitors and adversaries. Our challenge is everyone's challenge.

Evolving for Tomorrow

USTRANSCOM delivers on behalf of the Nation and has done so successfully for 30 years. However, we must avoid complacency. We face a challenging future marked by growing uncertainty, risk, and complex demands. We have to be ready for any possible set of circumstances. With that reality in mind, the Command is focused on evolving to respond to the Nation's needs today, while simultaneously preparing for the future. In doing so, we continue to

pursue opportunities in cyber and technology to modernize our systems and processes and ensure the enterprise remains ready and resilient across the spectrum of operations.

Transportation Management System (TMS)

The Joint Force's transportation requirements demand transparency, affordability, and asset visibility to preserve options in the current operating environment. Over the last three decades, USTRANSCOM developed technical solutions with the best available technology platforms at that time. As a result, the command now has a diverse set of programs that link movement requirements with available transportation assets across the enterprise. In 2015, USTRANSCOM identified 12 performance gaps in the current network structure that prevent the command from conducting integrated multi-modal operations. Most major manufacturers and distribution companies (e.g., Walmart and Amazon), use a Transportation Management System, a single platform for end-to-end shipment planning and execution, to increase return on investment. While the dollar may not be the bottom line for the DoD, a TMS promises to improve support to the warfighter and boost auditability.

In August 2017, the command initiated a proof-of-principle to determine the feasibility of implementing a TMS. This four-month proof of principle validated our assumptions on the capabilities and benefits of a TMS and confirmed its broad reaching value to the JDDE. TMS streamlines transportation and financial management processes, enhances enterprise-wide asset visibility and flexibility, and increases readiness. With plans for an enterprise-wide TMS, USTRANSCOM is forging ahead with implementation, beginning with a full-scale prototype. We are strengthening strategic partnerships with Defense Logistics Agency (DLA) and Pacific Command (PACOM), and inviting the Services, CCMDs, and other partners to a joint planning

event early this year. These engagements will build universal acceptance and allow the enterprise to leverage the operational power of a TMS.

Cloud Computing

This year, USTRANSCOM is in the process of rapidly transitioning all our digital applications to cloud-based technology. Leveraging best-of-breed commercial technology allows us to control costs, enhances Mission Assurance, and improves our agility and network resiliency. Furthermore, the cloud allows our program managers, developers, and software engineers to keep pace with industry, and track, review, and plan costs associated with IT projects, in real time. Economies of scale, standardization, and automation in cloud computing also promise to substantially reduce the cost of IT infrastructure. We anticipate completing this effort in the summer of 2018, to include secret level applications.

Pathfinding for the Department as its "Cloud Center of Excellence," the command is executing its migration, with about 25% of programs and applications already in the cloud. We are increasing security, access, and reliability while freeing resources and manpower to tackle our toughest cyber challenges. Most importantly, we are providing a production contract model and repeatable process for the entire Department to leverage. Establishing secure IT infrastructure for commercial industry must be a priority. USTRANSCOM is setting conditions for success for the rest of the DoD - we'll proudly continue to serve as the pathfinder for defense cloud-computing. Moving to the cloud not only improves security, it is also a key requirement in harnessing the power of data.

Building the "Data Lake"

Developments in the field of big data analytics suggest that transformative solutions to many of the most complex problems within the logistics enterprise are just over the horizon.

Access to large data-sets and the interrelationship between them, along with tools to translate data into knowledge, will enable the enterprise to rapidly convert knowledge into action. We must have the proper tools to actually derive meaningful insight from data and subsequently, convert knowledge into action. Currently, the transportation enterprise uses data to inform daily transactional functions but fails to fully leverage big data and advanced analytics to inform logistics forecasting and rapid decision making. Last year, we partnered with Defense Innovation Unit Experimental, Defense Digital Services, and the Strategic Capabilities Office to build a roadmap for constructing the enterprise's "data lake" and take advantage of the power of living data for logistics.

Leveraging Emerging Technologies

Transitioning our systems to the cloud and building the data lake are the foundational steps to realizing the potential in future technologies like machine learning, artificial intelligence, and autonomy. When distribution requirements surge and operator shortages strain the distribution system, demands will eventually overcome capabilities. To mitigate these challenges and meet dispersed distribution requirements, industry is innovating a future of low technology and high volume, in contrast to our current high technology and low volume model of more advanced and expensive defense assets. This future is based on machine learning and artificial intelligence platforms that eclipse the human advantage. We are embedded with the OSD Artificial Intelligence Working Group to realize this technology and ensure we are maintaining pace with industry and rival nations. Focusing on these technologies will also allow the enterprise to pursue a future in autonomous systems – trucks that drive themselves, ships that can navigate oceans without human inputs, and wide-body aircraft that can land on their own. Workforce Development

Meeting the challenges of our time and realizing the full potential in the opportunities ahead, demands an innovative, agile, and diverse workforce. These challenges are only increasing in complexity, and recruiting, developing, and retaining talent is more important than ever. At USTRANSCOM, we strive to cultivate a force that is agile enough to operate across GCC boundaries and adaptable enough to thrive in a complex and dynamic operating environment. To achieve this end, we undertook several initiatives within the past year to enhance our developmental opportunities and ensure we retain high-performing individuals. In an effort to broaden our workforce and expand partnerships, we instituted a civilian exchange with the Defense Logistics Agency (DLA) and National Geospatial-Intelligence Agency (NGA) through our civilian experiential development program. Through initiatives like this one, we intend to diversify thought and reinforce an already strong, collaborative relationship with our strategic partners. We are also developing robust strategic workforce planning initiatives that will help the Command identify and access the right talent needed to continue to meet national security mission imperatives. Among these workforce initiatives are adding data scientists, data analysts, data managers, and cyber professionals to the workforce, all critical to mission assurance in the future.

Our Commitment to Meeting Tomorrow's Challenges

For 30 years, the Nation has turned to USTRANSCOM's strategic power projection capabilities to respond to global threats and disaster. We do not know what tomorrow will hold, but the next year promises to be as busy and challenging as the last. The actions we take today to improve readiness, modernize the force, and assure our future capabilities have to be sufficient to ensure we remain the preeminent military power. USTRANSCOM will not get there alone. Together, We Deliver.

General Darren W. McDew

Gen. Darren W. McDew is the commander of U.S. Transportation Command, one of nine Unified Commands under the Department of Defense. USTRANSCOM is a global combatant command with functional responsibilities for air, land, and sea transportation for the Department of Defense, ultimately delivering national objectives on behalf of the President and Secretary of Defense.

General McDew was commissioned in 1982 following his graduation from Virginia Military Institute. He began his flying career at Loring Air Force Base, Maine. His staff assignments include serving as a member of the Air Force Chief of Staff Operations Group, Air Force aide to the president, and chief of the U.S. Air Force Senate Liaison Division and the director of public affairs, Office of the Secretary of the Air Force, both in Washington, D.C. As part of the Joint Staff at the Pentagon, General McDew also served as vice director for strategic plans and policy. He has served as the commander of 18th Air Force, Scott Air Force Base, and has commanded at the squadron, group and wing levels as well as at an Air Force direct reporting unit. He has deployed in support of ongoing operations in Central and Southwest Asia as an air expeditionary group commander and later as the director of mobility forces. Prior to his current assignment, General McDew was the commander of Air Mobility Command, Scott Air Force Base.

ASSIGNMENTS

- 1. October 1982 October 1983, student, undergraduate pilot training, Williams Air Force Base, Ariz
- 2. March 1984 June 1989, standardization and evaluation copilot, Aircraft commander, instructor pilot and flight commander, 42nd Air Refueling Squadron, Loring Air Force Base, Maine
- 3. July 1989 June 1992, combat crew training school examiner and instructor pilot, assistant deputy wing inspector and wing executive officer, 93rd Bomb Wing, Castle Air Force Base, Calif.
- 4. July 1992 April 1994, rated force planner, Directorate of Personnel Plans; member, Air Force Chief of Staff Operations Group, Headquarters U.S. Air Force, Washington, D.C.
- 5. April 1994 June 1996, Air Force aide to the President, White House, Washington, D.C.
- October 1996 June 1997, assistant operations officer, 14th Airlift Squadron, Charleston Air Force Base, S.C.
- 7. June 1997 June 1999, commander, 14th Airlift Squadron, Charleston Air Force Base, S.C.
- 8. August 1999 July 2000, Secretary of Defense Corporate Fellow, Sun Microsystems Inc., Palo Alto, California
- 9. July 2000 January 2002, commander, 62nd Operations Group, McChord Air Force Base, Wash. (September 2001 December 2001, commander, 60th Air Expeditionary Group, Southwest Asia) 10. January 2002 July 2003, commander, 375th Airlift Wing, and Installation commander, Scott Air Force Base, Ill.
- 11. July 2003 January 2005, chief, U.S. Air Force Senate Liaison Division, Secretary of the Air Force, Washington, D.C.
- 12. January 2005 July 2006, commander, 43rd Airlift Wing, and installation commander, Pope Air Force Base, N.C. (January 2006 May 2006, Director of Mobility Forces, Southwest Asia)
- 13. July 2006 November 2007, vice commander, 18th Air Force, Scott Air Force Base, Ill.
- 14. November 2007 February 2009, director of public affairs, Office of the Secretary of the Air Force, the Pentagon, Washington, D.C.
- 15. February 2009 December 2010, vice director for Strategic Plans and Policy, Joint Staff, the Pentagon, Washington, D.C.
- 16. December 2010 August 2012, commander, Air Force District of Washington, Andrews AFB, Maryland
- 17. August 2012 April 2014, commander, 18th Air Force, Scott Air Force Base, Ill.
- 18. May 2014 August 2015, commander, Air Mobility Command, Scott Air Force Base, Ill.
- 19. August 2015 Present, commander, U.S. Transportation Command, Scott Air Force Base, Ill

SUMMARY OF JOINT ASSIGNMENTS

1. April 1994 – June 1996, Air Force aide to the President, White House, Washington, D.C., as a major 2. February 2009 – December 2010, vice director for Strategic Plans and Policy, Joint Staff, the Pentagon, Washington, D.C., as a major general

FLIGHT INFORMATION

Rating: command pilot Flight hours: more than 3,300

Aircraft flown: T-37B, T-38A, KC-135A/R, C-17A, C-141B, C-9, C-21, C-130E/H, and UH-1N

MAJOR AWARDS AND DECORATIONS

Distinguished Service Medal

Defense Superior Service Medal with oak leaf cluster

Legion of Merit with two oak leaf clusters

Meritorious Service Medal with four oak leaf clusters

Army Commendation Medal

Air Force Achievement Medal

Joint Meritorious Unit Award with oak leaf cluster

Air Force Outstanding Unit Award with nine oak leaf clusters

Air Force Organizational Excellence Award with three oak leaf clusters

Combat Readiness Medal with three oak leaf clusters

National Defense Service Medal with bronze star

Armed Forces Expeditionary Medal

Kosovo Campaign Medal with bronze star

Global War on Terrorism Expeditionary Medal

Global War on Terrorism Service Medal

Armed Forces Service Medal

EFFECTIVE DATES OF PROMOTION

May 15, 1982 Second Lieutenant May 15, 1984 First Lieutenant Captain July 13, 1986 March 1, 1994 Major Lieutenant Colonel January 1, 1997 April 1, 2000 Colonel Brigadier General Sept. 2, 2006 Major General Dec. 9, 2008 Aug. 6, 2012 Lieutenant General May 5, 2014 General

(Current as of March 2017)

STATEMENT OF MARK H. BUZBY ADMINISTRATOR MARITIME ADMINISTRATION U.S. DEPARTMENT OF TRANSPORTATION

BEFORE THE COMMITTEE ON ARMED FORCES SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES AND SUBCOMMITTEE ON READINESS U.S. HOUSE OF REPRESENTATIVES

HEARING ON MOBILITY AND TRANSPORTATION COMMAND POSTURE

March 8, 2018

Good morning Chairman Wittman, Chairman Wilson, Ranking Members Courtney and Bordallo, and members of the Subcommittee. I appreciate the opportunity to discuss mobility and transportation command posture and specifically, the state of strategic sealift, including the long-term readiness of our Nation's surge sealift fleet and the ability of the U.S. commercial fleet and U.S. mariners to meet Department of Defense (DOD) sealift requirements.

The United States relies on sealift capabilities, which include ships, mariners, and strategic ports, to efficiently and effectively deploy military forces, respond to national emergencies, and provide humanitarian assistance on short notice at home and around the world. U.S. strategic sealift consists of both Government-owned vessels and a fleet of privately-owned, commercially operated, U.S.-flag vessels and intermodal systems, and the mariners who operate them. Together, these vessels and mariners transport 90 percent of equipment and supplies that deploy and sustain our military forces enabling responses to any location on the globe.

GOVERNMENT FLEET

The U.S. Government-owned fleet of 61 strategic sealift vessels includes 15 vessels operated by the Military Sealift Command (MSC) and 46 vessels in the Maritime Administration's (MARAD) Ready Reserve Force (RRF). Together, these vessels form the surge sealift fleet that rapidly deliver military equipment and supplies during major contingencies. These surge ships must be ready for quick activation and be reliable to enable multiple voyages over several months. These ships provide the initial surge of military capability, followed by sustainment shipping capacity which comes from the commercial industry.

The DOD determines the size and readiness of the RRF that is required to meet its sealift requirements. Generally, RRF ships must be ready to load military cargo for transport to areas of

operation within five days of receiving a DOD activation order. Operated under contract by commercial U.S. ship managers, these vessels form three-quarters of the Government's surge sealift capacity and are crewed by volunteer, contract, U.S. mariners.

Readiness of the RRF is a constant challenge given that the average age of the fleet is 43 years. I have concern that despite hard work by the collective sealift team, and a modest increase in program funding, some age-related issues may still present readiness challenges. Repairs of older equipment and aging systems is complex and shipyard periods are taking longer and becoming more expensive as the ships age. In addition, investments are needed to meet new regulatory requirements, such as upgrading and installing lifeboats on RRF vessels. As you are aware, the Navy's 30-year shipbuilding plan includes a three-prong surge sealift recapitalization strategy that consists of service life extensions, acquiring used commercial vessels, and building new vessels at U.S. shipvards. MARAD and the U.S. Transportation Command (USTRANSCOM) are working with the U.S. Navy to address the challenges of adequately resourcing current readiness as well as the service life extension of nearly the entire RRF fleet out to 60 years. We are working on a strategy for the acquisition and conversion of used ships, including the purchase of two vessels as authorized by the Fiscal Year (FY) 2018 National Defense Authorization Act (NDAA). MARAD will continue to collaborate with our DOD partners to address maintenance, repair, and modernization of the existing RRF vessels to keep the capability viable until open market acquisition or new construction can enhance the overall fleet.

The RRF is a component of the National Defense Reserve Fleet (NDRF), authorized by statute to provide a reserve of ships for national defense and national emergencies. In addition to providing the RRF ships, MARAD manages NDRF vessels used to train merchant mariners and respond to national disasters. Most recently, RRF and NDRF ships were activated to support relief activities of other Government agencies following Hurricanes Harvey, Irma, and Maria, as was done for Hurricanes Katrina, Rita, and Sandy, and the earthquake relief efforts in Haiti. During these deployments MARAD vessels supplied citizens and first responders with housing, meals, logistical support, and relief supplies, including critical Federal Aviation Administration replacement air navigation equipment that was delivered by one of the activated vessel to the Virgin Islands.

Like RRF vessels, training ships in the NDRF are also aging and nearing the end of their life cycles. The six state maritime academies use MARAD training ships to graduate more than three-fourths of entry-level merchant marine officers annually. As a result, ensuring the continued availability of training ships is a critical need and a high priority for MARAD. As a result of the recently agreed upon two-year budget cap deal, the Administration is amending the President's FY 2019 Budget request to include an addition al \$300 million to fund the replacement of two of the oldest training ships that MARAD provides to maritime academies in

New York and Massachusetts. Both training ships are well over 50 years old and are serving beyond their designed service lives. The Administration proposes to purchase two used ships that will be converted in U.S. shipyards into modern training ships for our future mariners.

COMMERCIAL FLEET

The Department of Defense does not rely on the Government-owned surge sealift fleet to deliver supplies and equipment to service members and their families stationed overseas during steady-state operations. The U.S.-flag commercial fleet is critical to accomplishing this mission and providing longer term sustainment during military deployments. Access to the commercial US-flag fleet is formalized through the Voluntary Intermodal Sealift Agreement (VISA) program, and the Maritime Security Program (MSP), with the MSP being key to U.S. sustainment capability and supporting the pool of highly trained Mariners necessary to man our government owned RRF fleet when activated. Created in 1996, the program helps maintain an active, privately-owned, U.S.-flag and U.S.-crewed fleet of 60 militarily useful commercial ships operating in international trade. MARAD provides MSP participants an annual stipend and their ships are available "on-call" to support DOD's global transportation needs. The MSP supports employment for 2,400 U.S. merchant mariners, and provides DOD with assured access to the critical multibillion-dollar global network of intermodal facilities and transport systems maintained by MSP participants.

Ships of the MSP have carried more than 90 percent of the sustainment cargo required for operations in Iraq and Afghanistan and stand ready to play a vital role in support of all future U.S. operations. The militarily useful capacity of the fleet is now at its highest levels ever to meet DOD's requirements. Two new roll-on/roll-off ships entered the program last year adding 320,000 square feet of new capacity, greatly enhancing DOD's ability to move heavy armored units worldwide. The FY 2019 President's Budget Request includes \$214 million for MSP to support a \$3.6 million per ship stipend. While this request is less than the fully authorized level for MSP, it reflects hard choices as the Administration pursues rebuilding DOD capabilities. The Department supports MSP and recognizes the critical contribution it plays in the nation's security.

Unfortunately, the U.S. commercial presence in the international maritime domain has been on a steady decline since its peak in World War II and is currently at the lowest level in American history. Of some 40,000 large, oceangoing commercial vessels in the world today, just 181 sail under the U.S. flag, including 81 vessels operating exclusively in international trade. While many factors have contributed to this decline, as Maritime Administrator, I take seriously my charge, as required by statute, to ensure that sufficient U.S.-flag ships and mariners are available to carry our Nation's domestic and international commerce while meeting DOD sealift requirements.

Access to cargo is critical for ship operators to compete globally and to remain operating under the U.S. flag. Cargo preference laws keep U.S.-flag operators competitive by requiring shippers to use U.S.-flag vessels for the ocean-borne transport of a significant portion of certain cargoes purchased with Federal funds. Specifically, 100 percent of military cargo, and at least 50 percent of non-military Government owned or impelled cargo transported by ocean, must be carried on U.S. flag vessels subject to vessel availability, and fair and reasonable rates. A strong cargo preference mandate is vital to the sustainment of a U.S.-flagged, privately-owned commercial fleet and to the continued availability of American merchant mariners.

In addition to cargo preference laws, U.S. coastwise trade laws, commonly referred to as the Jones Act, help support national security priorities. Jones Act requirements support U.S. shipyards and repair facilities, as well as the supply chains that produce and repair Americanbuilt ships, and ensure that intermodal equipment, terminals and other domestic infrastructure are available to the U.S. military in times of war or national emergency. The Jones Act also requires the use of qualified U.S.-flag vessels to carry goods in domestic commerce, which includes transportation between and among the U.S. mainland, Hawaii, Alaska, and Puerto Rico. This requirement results in the employment of the majority of U.S. mariners. It also ensures that vessels navigating daily among and between U.S. coast ports and inland waterways are operating with U.S. documentation and crew rather than under a foreign flag with foreign crew. The U.S. merchant mariners of the Jones Act fleet are our "eyes and ears" on domestic routes and waters and add an important layer of security to our Nation.

MARINERS

Qualified U.S. merchant mariners are essential to operate the surge fleet of 61 Government-owned cargo ships in times of need, whether in peace or war. The use of Reduced Operating Status (ROS) crews onboard RRF ships is the multiplier to maintaining sealift readiness for contingencies. The mariners required to operate these vessels are civilians regularly employed on board U.S.-flag commercial ships. These mariners will be called upon to activate the surge fleet should there be a sealift mobilization, and we will need them all to keep our fleet sailing.

Because of the historically low number of ships in the U.S.-flag, oceangoing fleet over the past several years, I am concerned about the availability of a sufficient number of qualified mariners with the necessary endorsements to operate large ships (unlimited horsepower and unlimited tonnage) and to sustain a prolonged sealift mobilization beyond the first four to six months. Historically, the men and women of the merchant marine have always stood up in times of need to meet any task set for them and would likely extend their time at sea beyond normal tours if called upon to do so. However, it is critical to ensure we have enough qualified U.S. mariners to safely crew our Government vessels so that the readiness of the force is not negatively impacted.

The U.S. Merchant Marine Academy at Kings Point, NY, and the six state maritime academies graduate more than 1,000 entry-level new officers each year; however, there continues to be a shortage of mariners who have the credentials and experience to serve in senior-level positions. These positions include masters (captains), chief engineers, chief mates, and first assistant engineers/mates. On average, it takes 10 years to become a master or chief engineer. One of the contributing factors for this projected shortfall is the declining pool of U.S.-flag ships that employ these mariners.

The FY 2017 NDAA directed MARAD to convene a working group consisting of agency and maritime industry representatives to examine and assess the size of the pool of qualified U.S.-citizen mariners necessary to support the U.S.-flag fleet in times of national emergency and make recommendations to enhance the availability and quality of interagency data. This report, submitted through MARAD to Congress last month estimated a shortfall of 1,800 qualified mariners. The estimate assumed that all qualified mariners would voluntarily report when called upon, and that there will be no ship losses or personnel casualties. Given this assessment, I am working closely with the USTRANSCOM, MSC, the U.S. Coast Guard, and the commercial maritime industry to develop proposals to maintain an adequate number of trained mariners, and to ensure our mariners receive specialized training to operate in contested waters, such as chemical, biological, and nuclear defense training, marksmanship, and shipboard damage control in the event of an attack. Additionally, we are working to better track licensed mariners who may no longer be sailing, but could serve if needed, and to develop tools to understand and analyze changes in the numbers of fully qualified mariners trained and available to meet the Nation's commercial and sealift requirements at any given time.

CONCLUSION

Our military's surge sealift capabilities rely on our Nation's commercial fleet and the mariners who crew these ships—in both peace and war. The decline of the U.S.-flag fleet and the availability of qualified U.S. mariners are of great concern to MARAD and we are exploring a range of options to increase the size of the U.S.-flag fleet with our stakeholders and the Administration. MARAD will continue to leverage, as appropriate, the current mainstays of the merchant marine to support strategic sealift: the Jones Act, MSP, and cargo preference. However, as illustrated by the President's National Security Strategy, we live in an increasingly competitive world which requires us to rethink how we address long-term strategic issues facing the industry. I am also reminded by a quote from naval historian Alfred Thayer Mahan, that "control of the sea, by maritime commerce and naval supremacy together, means predominant influence in the world." I believe that while MARAD can support the sealift needs of USTRANSCOM today, we are uncomfortably close to the edge of not being able to fulfill this critical mission in the near term because the world has changed and the previous assumptions

regarding a benign environment may no longer be true. You have my commitment that we will consider any and all options intended to foster, promote, and develop the U.S. maritime industry.

Thank you for the opportunity to discuss the role of the merchant marine in meeting our Nation's sealift needs. I appreciate this Subcommittee's support for maritime programs and I look forward to working with you to advance maritime transportation interests of the United States.

Rear Admiral Mark H. "Buz" Buzby, USN, Ret. Administrator

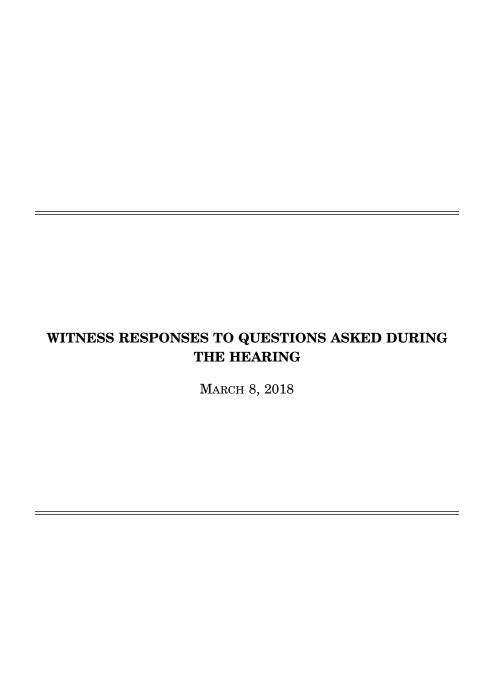
Rear Adm. Mark H. Buzby was appointed by President Donald Trump and sworn in as Maritime Administrator on August 8, 2017. Prior to his appointment, Buzby served as president of the National Defense Transportation Association, a position he has held since retiring from the U.S. Navy in 2013 with over 34 years of service.

A 1979 graduate of the U.S. Merchant Marine Academy, Buzby earned his Bachelor of Science in Nautical Science and U.S. Coast Guard Third Mate License. He was commissioned in the US Navy in June 1979, is a graduate of the Joint Forces Staff College and holds master's degrees from the U.S. Naval War College and Salve Regina University in Strategic Studies and International Relations respectively.

Buzby commanded destroyer USS CARNEY (DDG 64), Destroyer Squadron THIRTY-ONE, Surface Warfare Officers School Command, and Joint Task Force GUANTANAMO BAY. As a junior officer, Buzby served in USS CONNOLE (FF1056), USS ARIES (PHM 5), USS YORKTOWN (CG 48), USS JOHN PAUL JONES (DDG 53) and USS SHILOH (CG 67) primarily in operations and combat systems billets. In 1985, he was the Atlantic Fleet Junior Officer Shiphandler of the Year.

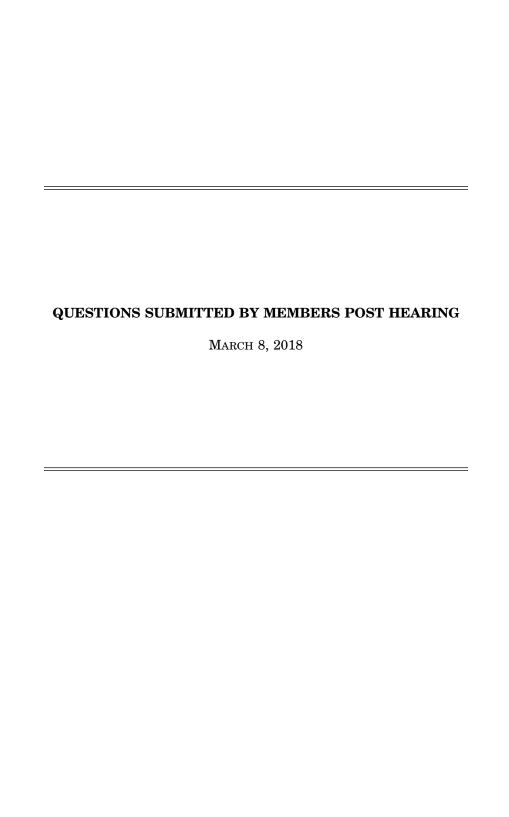
Ashore, he served on staffs of SIXTH Fleet, US Fleet Forces Command, the Navy staff, and the Joint Staff. Buzby served as the Commander of the U.S. Navy's Military Sealift Command from October 2009 to March 2013.

Buzby's personal awards include the Defense Superior Service Medal, Legion of Merit (four awards), Bronze Star, Defense Meritorious Service Medal, Meritorious Service Medal (five awards) and various other unit and campaign awards.



RESPONSE TO QUESTIONS SUBMITTED BY MS. HANABUSA

Admiral Buzby. On an annual basis, of the Maritime Security Program (MSP) ships that receive stipends, none have been called into full-time, exclusive service for the Department of Defense (DOD). Nevertheless, all MSP vessels transport DOD and/or other impelled U.S. government cargoes over the course of any year as part of normal operations. In addition to the MSP stipend, these ships are paid to transport government cargoes. The MSP provides a monetary incentive for DOD to have assured access to a fleet of 60 privately-owned, commercially active, and militarily useful ships, with predominantly U.S. citizen ownership and crews, as well as the global intermodal networks maintained by most MSP participants. In return for a monthly retainer, or stipend, participating carriers commit to making these ships and associated intermodal capacity available "on call" to meet DOD transport requirements. The MSP fleet is a key component of U.S. sustainment sealift readiness. [See page 15.]



QUESTIONS SUBMITTED BY MR. COOK

Mr. COOK. Must an airline be a U.S.-flagged carrier to participate in CRAF? Must that U.S. air carrier participate in CRAF in order to bid on routes awarded under the GSA city pair program? With all of that in mind, would it make sense that the GSA city pair program should use the same tier system utilized by the CRAF program?

General McDew. Yes. To be eligible to participate in CRAF, air carriers must possess a certificate issued under section 41102 of title 49, US Code. Certificates under that section may only be issued to U.S. citizens.

Yes. Since the 1990s, the GSA has required CRAF membership as a condition of being able to bid on, and be awarded, routes under the City Pair Program. This policy was implemented at the request of DOD following the first Gulf War in 1990–1991.

The division of CRAF into domestic, international (long-range), and international (short range) segments defines the capability available to support DOD within those segments. I would defer to GSA on whether this same segmentation would meet GSA's needs under the City Pair Program.

QUESTION SUBMITTED BY MR. CONAWAY

Mr. Conaway. Admiral Buzby, the Texas A&M Maritime Academy has been in operation since 1962 and is the only State maritime academy in the Gulf of Mexico. Unfortunately, the Texas A&M Maritime Academy has operated without a suitable training vessel for over a decade. The President's FY19 budget provides \$300 million to acquire and convert ships for the New York and Massachusetts Academies. However, the budget does not include anything for Texas. Additionally, it eliminates the direct support that all Academies rely on which also places the Texas program in serious jeopardy. What is the administration's plan to ensure the Texas A&M Maritime Academy will get the asset it needs to continue making its contribution to our maritime mobility and transportation capacity?

Admiral Buzby. MARAD's plan is to recapitalize the Training Ship Fleet based on remaining service life. The order in which the training ships are replaced must be based on the remaining service life of each vessel to ensure safe operations and to maximize continuous availability of critical training capacity for students at all the state maritime academies (SMAs). This approach would place Texas A&M Maritime Academy (TAMMA) fourth in line to receive a replacement vessel. The FY 2019 House and Senate Appropriations Committee markups provide \$300 million for the construction of the second National Security Multi-Mission Vessel

It will take several years for MARAD to recapitalize the entire training ship fleet. During that recapitalization period, all the SMAs will be in a ship-sharing phase. In fact, TAMMA cadets will be trained aboard the TS EMPIRE STATE, as part of the current ship-sharing arrangement. The Senate Appropriations Committee markup for FY 2019 provides \$8 million to cover the cost of ship-sharing to help reduce related expenses borne by the SMAs, including TAMMA. MARAD will also host a conference this fall to develop a detailed ship-sharing plan, at which all representatives of the SMAs will have ample opportunities to provide input.

Finally, in recognition of concerns that TAMMA officials have about the current

Finally, in recognition of concerns that TAMMA officials have about the current training vessel arrangement, MARAD offered to make one of our larger Ready Reserve Fleet (RRF) ships available to TAMMA for pier-side U.S. Coast Guard-required training. Relocating a RRF ship to TAMMA would also provide the additional classroom space required to justify requests for additional funding from the State school system. A RRF ship's presence would also prepare TAMMA to receive a big-

ger and newer ship, if dredging and pier improvement necessary to accommodate a vessel of this size are made.

QUESTIONS SUBMITTED BY MR. BYRNE

Mr. Byrne. The United States is faced with declining merchant mariners and our own policies appear to exacerbate this shortage. The 10-year security assistance memorandum of understanding signed with Israel in 2016 precludes Israel from purchasing U.S.-flagged vessels with U.S. mariners. At a time when the Maritime Administration believes we are short over thousands of mariners, is such a policy wise? Wouldn't the United States be better off doing everything it can to make it easier for U.S. shipping companies and their merchant mariners to participate in sealift programs that serve to supply U.S. Armed Forces?

Admiral Buzby. Efforts have been made to address concerns within the MOU. In relevance to the U.S. merchant marine, the Government of Israel will be permitted to continue its utilization of funds derived from the Foreign Military Financing program to procure U.S. sourced fuels. These fuels will be mandated for transport onboard American flag vessels.

QUESTIONS SUBMITTED BY MR. GALLAGHER

Mr. Gallagher. What impact has INSURV inspections had on the Ready Reserve Fleet and how has conducting these inspections influenced or change readiness expectations?

Admiral Buzby. The Navy's Board of Inspection and Survey (INSURV) has no impact on readiness of RRF ships. By statute, MARAD must ensure the RRF fleet meets the regulatory requirements of the U.S. Coast Guard, and maintains ships in-class, under the classification society rules of the American Bureau of Shipping (ABS). MARAD has adequate control measures for inspection and quality assurance to identify needed repairs to ensure readiness, but the RRF still requires resources to meet planned service life extensions and maintenance of an aging fleet. The average age of Ready Reserve Force (RRF) vessels is 44 years.

MARAD supports the Navy's plan for RRF recapitalization, but notes that the requirement to reach 60-years of service life for nearly all 46 ships in the RRF fleet is likely to result in resource challenges. Maintenance activities necessary for these service extensions take longer and are more complex. As the service life of hulls, equipment, and systems reach the end of economical service, MARAD is compelled to apply more resources across the entire fleet for urgent requirements, and to defer non-critical efforts for military utility and readiness efforts for extended service life. The GAO's August 2017 report: NAVY READINESS—Actions Needed to Maintain Viable Surge Sealift and Combat Logistics Fleets (GAO-17-503) details how readiness is impacted by deferred maintenance and extension of service life to 60 years.

Mr. GALLAGHER. Would there be an impact on the merchant mariner manpower shortage if the Navy required the credentialing of surface warfare officers to meet international rules of the roads requirements?

Admiral BUZBY. In the near term, there would be little or no impact for licensed mariners. It generally takes eight to ten years to attain the training and sea time necessary to reach the highest level unlimited credentials of Master or Chief Engineer. Nevertheless, a percentage of the sea time spent aboard certain military vessels does qualify as valid sea time for purposes of obtaining or raising the level of a merchant mariner credential. In addition to sea service, however, there are other training requirements and written examinations that all applicants are required to pass in order to obtain or raise the level of a U.S. merchant mariner credential. Assuming a percentage of Surface Warfare Officers (SWOs) obtain the highest level of mariner credentials and exit military service for commercial U.S.-flag maritime employment, then such a requirement could help provide some relief.

MARAD is most concerned about a shortage of mariners with the highest level unlimited credentials. While data limitations currently prevent MARAD from breaking down mariner shortages into subcategories, in MARAD's experience hiring mariners for its own organic fleet, and according to similar accounts from representatives of labor and industry, it is most difficult to find higher level unlimited licensed mariners and not entry-level Third Mates or Third Engineers.

It is also important to note that merchant mariners are civilians, and service aboard any ship is completely voluntary. The proportion of fully qualified mariners that might volunteer for sealift mobilization cannot be estimated with greater accuracy without a survey to determine current levels of volunteerism. Accordingly, the Maritime Workforce Working Group (MWWG) recommended conducting a survey of

U.S. merchant mariners to determine their availability and willingness to volunteer for sealift services if asked to do so. In response to that recommendation, MARAD is working with the Department of Transportation's Bureau of Transportation Statistics and has secured a contract to conduct a biennial survey of mariner availability and willingness to sail for specific types of licensed and unlicensed mariners.

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